Lectures
ON
AFFECTIONS OF THE EYE IN RELATION TO MEDICINE AND SURGERY.

Delivered at the Harveian Society,

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LECTURE III

(*Concluded from page 447.*)

THERE can be no question that the Germans are particularly liable to myopia. One of their own nation has said that at a great International Congress he had no hesitation in addressing a man wearing strong concave glasses in German, because he was certain he should meet with a brother, proving incidentally that the disease is rare in other nations. It is reasonable to inquire, then, what are the special conditions to which Germans are exposed that render this defect of vision so remarkably common amongst them. The answer is, that up to a very recent period the Germans began to work their children at a very early period; that they gave them long and severe lessons, many of which had to be learnt at night; and that the amount of light supplied to them was insufficient—in other words, that with imperfect illumination they made great demands upon the accommodation of their children's eyes, and that this strain was augmented by the bad type and paper that were in use for school-books. Each of these points deserves consideration, and it may be remarked that the Germans are fully alive to the great, and indeed national, importance of the subject, and have discussed the whole matter in a thoroughly scientific spirit, and we are indebted to them for numerous suggestions, which should be adopted in our schools if we wish to preserve the eyes of our posterity in a healthy condition.

The amount of light, both of day and artificial, that is supplied in schools is a matter of great importance, for it is acknowledged on all hands that the feebler the light the closer is the object instinctively brought to the observer to be recognised, and amongst the various suggestions of a practical nature that have been made is one by Hoffmann of Wiesbaden, that in every schoolroom a set of Snellen's test types should be suspended, and as soon as they are no longer legible by the healthy at a normal distance the school should close. In school buildings the windows should, if possible, look to the south or east, a much greater amount of light entering with equal window space from those directions, especially in the earlier hours of the day, than from the north, whilst type of a given size is read at a much greater distance with south than with north light. Cohn and Javal alike think that it is almost impossible to get too much light in a schoolroom, the latter maintaining that there should be sufficient light in the darkest part of the room to read easily and well even on dark days. The size of the window must manifestly exert a great influence upon the amount of light admitted, and Cohn has laid down the rule that there should be at least one square foot of window pane for every five square feet of flooring, and in some recent Parisian models there is actually one foot of window to each foot of flooring. The height of the window from the floor is of importance, since a room is always dark with high windows, owing to the obliquity of the entering rays and the loss by reflection; the sill of the window should not be lower than one foot from the ground. It is acknowledged that the light should enter from the left hand, since this enables the letter that has just been formed in writing to be distinctly seen; whereas if the light enter from the right, the last written letters are in the dark. The total area being the same, three windows are better than two, for since the illumination obtained from a given light diminishes as the square of the distance, more light will be obtained in the remoter parts of the room with three than with two lights. Cohn recently found in the schools of Breslau 106 windows to the right of the pupils, 62 in front, 93 behind, and 463 to the left, and his researches in 1865 demonstrated that it was advisable that school buildings should be as free from surrounding houses as possible, for the narrower the court, and the higher the adjoining edifices, and the lower the chamber in which the children worked, the higher was the proportion of myopes in the elementary schools. The ignorance even of well-instructed people on this point is very surprising. The nursery is often the darkest room in the house, and I have known a school built with the opportunity of obtaining perfectly free daylight, with no possibility of any obstruction, looking into a rock, in order that the minds of the children might not be diverted from their work by any object passing along the road. The colour of the artificial light employed is of some importance, and the results of various inquiries that have been made seem to show that it is in the large admixture of green that the unpleasant effects of most kinds of artificial light depend. Sunlight contains only 14·7 per cent. of green, whilst the light of oil lamps contains 25 per cent., and that of gas 37·5 per cent. Most persons on this account prefer the softer tint of oil flame to that of gas.

The amount of heat eliminated is also a point to which attention has been directed; since every form of artificial light is much less powerful than sunlight, the source of light must be brought into more or less close approximation to the work, and the influence of the heat that is generated is then very sensibly felt, leading to cerebral congestion and headache. Erismann has given some tables showing the amount of heat given off by different illuminating agents, and he bases his statements on Welter's law that the amount of heat developed is equivalent to the amount of oxygen that is consumed. He found that to produce an amount of light equal to six ordinary wax candles for twenty-four hours was with petroleum flat wick, 1728 grammes; petroleum round wick, 2483 grammes; rubol, 2048 grammes; gas, 4510 grammes; six stearine tapers, 4366 grammes. Hence gas and wax produce most heat, oil and petroleum the least.

The form of the desks and school furniture is a point that has been almost entirely neglected in England. In many schools they are just what have been run up by the village carpenter in the simplest and most solid form compatible with cheapness that can be conceived. The slope of the table is of importance. If a book be placed vertically in front of us, we can read well, and no inclination of the head is required. If it be placed at such an inclination as to form an angle of 45° with the horizon, we can still, by turning the eyes down, read well without inclining the head; but if the book is placed horizontally the head is naturally bent downwards to relieve the exertion of turning the eyes strongly downwards, and this tends to congest the vessels of the head. Hence the desk should be inclined and not flat; but an angle of 45° would be too much, the books, &c., would slide off. A rise of two inches for each twelve inches of table breadth is sufficient. Fahrner considers that the first movement of the child in leaving the normal position consists in inclining his head forward and to the left, and that this apparently unimportant movement is the root of the whole evil; for it in the first place causes the centre of gravity of the head to fall in front of the vertebral column. The muscles of the neck are consequently called into play; they soon, however, become fatigued, and transfer the work to the muscles of the back, and thus at the expiration of a few minutes the head sinks upon the left arm, and the eyes are brought into very close proximity with the paper. All physicians are now agreed that the desk should be a little higher than the elbows when hanging naturally, and that the size of the child or youth should be taken into consideration.

So much attention has lately been directed to this subject in Germany that an imperial edict recently promulgated requires that every new school and institution in Breslau shall furnish a report of the kind of bench about to be used, and the reasons for its selection. Some curious suggestions have been made to keep the body straight. Schreber recommended an instrument with the portentous name of "Myopodiorthorticon," which consisted of a vertical pillar on which a sharp-edged shelf slided, which was made to rest upon the clavicle, and thus, when the child leaned forwards, produced acute pain by pressure on his clavicular nerves. Kallmann introduced a "Durchsichts-stäter," or supporting-frame with a glass, which Cohn warmly recommends.

I may just mention the arrangements which the last and one of the best informed writers on this subject regards as

most serviceable for school work (Reuss). In the first place the distance between the edge of the desk and the front edge of his seat must be 0, or they must even somewhat overlap each other; secondly, the difference in height between the bench and the desk must be as great as the distance of the elbow from the bench when the arm is hanging freely down: = 5 – 7 centimetres; thirdly, every school bench must have a proper back, which must not be the back of the desk behind. There is much difference of opinion amongst high authorities as to the best form of back, some preferring a high back, others a T-back of moderate height, and others again a low back. The high back supports the lower part of the dorsal region of the spine, and thus relieves the lumbar vertebra of part of the superincumbent weight. The moderately high T-back supports the sacrum or the lower lumbar vertebræ, fixes the pelvis, and renders the sitting position one of rest. The low back fits into the curvature of the loins, and fulfils the purposes of both the other forms partially. It is the form which is generally regarded as being the best. It is on the whole best that each seat should have its own back, since with continuous backs, overcrowding, which should be religiously avoided, may occur. The back should be curved to suit the form of the body, and be firmly and solidly constructed.

The bench on which the scholar sits should be hollowed out continuously with the back, and be either flat or a little raised in front. Its breadth should be in accordance with the size of the boy from 23 to 34 centimetres. The height of the bench should be such that the knee is bent at right angles to the well supported and resting thigh, and that the soles of the feet may be planted flat on the ground or on a foot board. The table top must be broad enough to support books and papers, and to allow them to be pushed forward so far that they do not interfere with writing. Thirty-two to forty centimetres are the right dimensions. The desk top must, moreover, form an inclined plane; nothing conduces so much to stooping as a flat desk. The limit is that the ink should not flow back in the pen, but this is much too great, since books and papers would slide off unless prevented by a raised edge at the bottom of the desk, and such edges are objectionable, since they hurt the arm in writing. An inclination of 2° in 12° is about right. For reading the desk inclination may be as steep as possible, but this is not easy to manage in school desks. The height of the desk is from a medical point of view secondarily determined as soon as the height of the bench and the difference between the bench and the desk is determined. If the feet are to rest on the ground the height of the desk will have to be different, according to the size of the boy, which may be inconvenient to the teacher. The difficulty may be overcome by having a movable latticework for the feet to rest on. The desk lastly should be sufficiently broad, 50 to 60 centimetres, for each boy. Arrangements require to be made to allow of standing as well as sitting.

An immense amount of attention has lately been directed to various points in printing which have been shown to exert an influence on the vision. First, in regard to the letters themselves. No one can compare the Gothic with the modern Roman letters without being struck with the superior legibility of the Roman type. The flourishes of some of the letters, the close similarity to one another of others, as of the h and k, the f and s, the u and the n, all render a closer examination of the print requisite in the one case than in the other. Javal, to whom we are indebted for much interesting observation on this subject, says that the increased number of myopes that has, he declares, been noticed in Elsäss since the annexation consequent on the war of 1870 is due to the introduction of German type and writing into that province. Weber considers that the absence of fine upstrokes in the Roman form of type is a distinct advantage, and, further, that the arched, instead of the pointed, shape of the letters in the Roman type renders them more easy to read, and therefore require less earnest fixation. Weber maintains that a child of eight years of age who has read and worked with Latin or Roman type for three months is in advance of a child who has read the Gothic type for two years. The size of the short letters, such as m or n, should not be less than 1·5 mm., and the interspaces between two words should be somewhat greater, 2 mm. or 2·5 mm. It is considered that letters smaller than this are injurious. The leader of *The Times* has a height of short letters of this size, and that is a very legible print to the ordinary eye at a distance of from twelve to fifteen inches. A much smaller type can be seen. Weber found that print, the small letters of which were only 0·7 mm. high, could be seen at 35 cm., at which distance the angle of convergence is very small, not exceeding 11° 21′, could be seen, but that it could only be read with difficulty. With good print and under favourable conditions Weber found that 1464 letters could be read in a minute with a loud voice, and in a low voice 1900 in the same space of time. Hence in one second 24 with a loud and 31 in a low voice. The perception of a letter requires 0·0316 seconds, and its expression 0·0409 seconds. Many journals have type the short letters of which have a height of 1 mm. or less. The thickness of the letters is about 1-4th mm., or 1-100th of an inch as a rule, and should certainly not be less than this in school books. The little transverse line at the top and bottom of many letters is of importance in obviating the effects of irradiation. The form of the letters has been particularly studied by Javal. The length of the lines is not without its effect. A very short line involves waste of power in the movements of the eye, and it is to be regretted that we do not read the lines alternately backwards and forwards. On the other hand, a long line like the quartos and folios of old times not only fatigues the eye, but renders it easy to mistake the next line in the return movement. The length of line of *The Times* leader is 2·75 mm. I take Justin McCarthy's "History of Our Own Time," as a good specimen of modern type and printing, and with it the School Primer and the Fifth and Chambers's Reader may be compared. In the Virgil of Pickering's diamond edition there are 32 letters to the inch. In the Walton's Lives about 30. In the Iliad 28 Greek letters. In Wordsworth's Poems, Kent's small edition, there are about 20 letters to the inch.

There are still other conditions which deserve attention, and amongst them may be mentioned quality of paper, character of type, excellence of impression. Now and again the fount of type of one of our daily newspapers gets worn out, and everyone is aware of the unpleasant effects that are produced by impressions of letters which are partly imperfect—when, for example, c cannot be distinguished from o or from e, when t and l become confused, and the rounds of a, b, d, g, and p become filled with ink. Such imperfections are greatly increased by roughnesses and inequalities of the paper, and it is only requisite to read a page or two of one of the cheap editions of a popular author, such as Dickens—though even these are princely as compared with works published fifty years ago—and then a page or two of an edition de luxe to appreciate the influence of paper and printing. The introduction of pictures is of decided advantage, since they both excite the attention and relieve the eye.

It would, I think, be useful, especially in cases where there is an hereditary tendency to myopia, to teach by means of long slips or wall-texts with a picture at the head sold by most stationers. The child should be placed with his back to the light, and at a distance of from four to six feet from the slip, the separate letters of which, as well as the details of the picture, may be indicated by the teacher with a light wand.

There is good reason for believing that writing has a powerful influence in inducing myopia. Cohn has accordingly made the sensible suggestion that stenography or shorthand should be introduced into schools a little above the lowest classes. The size of the type or symbols is, it is acknowledged, smaller than that of ordinary writing, but not smaller than the Greek. The acquirement of the art is easy, and the saving of time is very great.

The question of the advisability of using slates for instruction in writing has been considered, and, as it appears, there is some difference of opinion. It may be shown that with the same amount of light and an equal degree of sharpness of vision, letters of the same size written with ink and with slate pencil are seen, the former at a distance of four feet, the latter at only three feet, even when the unpleasant reflex from the slate is avoided; and hence with the abolition of slates from schools one condition leading to myopia would be avoided.[1] Weber thinks that many of the difficulties and troubles occasioned by writing are the same, whether slate-pencil, lead-pencil, or pen and ink be used; but still thinks it desirable that after the first half year pen and ink should be preferred. Cohn agrees with Horner, but suggests the employment of white artificial tablets, made by Emanuel Thieben, a manufacturer of Pilsen, which can be written upon with lead-pencil, and which he has found to be so far superior to slate that writing

[1] Deutsche viertel jahlsh. f. Oeff. Gesundheitspflege, B. x., H. iv. 1878.

which can be read at six metres on the white slab can only be read at five metres on slate.

The work performed by girls, especially when very young, is not beneath the attention of the surgeon. There cannot be a doubt that every girl should be taught the use of the needle and thread, and it is satisfactory that this view is taken by the school boards generally throughout England; but it is by no means necessary that the work which is put into their hands should be of a nature to make a severe strain upon their eyes. That such strain applied to the eyes in this particular way is injurious is well known from the effects of lacemaking in Belgium and France, which is admitted on all hands to seriously impair the vision of many workers annually. I find that in moderately fine calico there are about 72 threads to the inch; and if two of these are taken up at every stitch the work is done to the twenty-sixth of an inch, which is even so very small. But finer kinds of cambric run to 150 or more to the inch, and must be very trying to the eye. Weber observes: "Who need trouble himself about a girl learning to knit a stocking requiring 35,000 or even 60,000 loops, when the whole article can be finished by machine work in an hour or two." But, as Cohn remarks, if the girl is, instead of knitting stockings, occupied with Greek characters or conic sections, she is not much better off. On the whole, it appears that no child should be given work to do which requires to be held closer to the eye than one foot, and with this all due care should be taken in regard to light and other particulars.

From all this we may conclude that children, especially at the age of from ten to seventeen, should not be overtaxed, and that girls in particular should not be pressed to work at periods when they are naturally languid and exhausted. The work to be done should be mainly done in school, night-work and night lessons should be short. Nor should children be made to do much work in the morning before breakfast, nor immediately after food. The books that should be given to young children ought to be light to hold in the hand; the paper should be clean, white, and smooth. The letters should be large in proportion to the youth of the child, well formed and well printed. The spaces between the lines and the interspaces of the words should be relatively wide. The lines should not be too long. The light should be abundant, and should enter from the left. In writing he should sit upright and square to the desk. The desk itself should be inclined, and there should be a due proportion between the height of the desk and the bench or stool on which the child is sitting. Reading small print by a dim light is to be discountenanced, and reading should not be permitted in bed. The work given to girls to learn sewing should not be too fine, and no black work should be given, especially at night.

A FEW REMARKS UPON THE VARYING RESISTANCE OF THE HUMAN BODY.

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(Concluded from page 453.)

PATHOLOGICAL increase of resistance may be due to the same causes that produce changes during health if they are excessive or prolonged. These are a thickened epidermis, a dry skin, anæmia of the tissues below the epidermis, and this may also happen from organic change in the tissues themselves. When from any cause we find the temperature of a part of the body as tested by a surface thermometer is lower than the rest, we nearly always without hesitation conclude that the resistance A exceeds that of the other parts; also that the difference between B and C is augmented; but we cannot be certain about the resistance C, except in old-standing cases, when we may expect this too to be increased. When, on the other hand, there is a local rise of temperature, we may be as sure that both A and B are diminished, more especially A, and in many cases C is also reduced. In spinal disease or in disease or injury of the nerves, we usually find the following electrical reactions, which are so well marked in infantile paralysis that I will take this illness as typical of these cases. In infantile paralysis after the lapse of a few days we find the resistances A, B, and C all increased, but A and B in a greater ratio. As atrophy proceeds, we find that the resistance B approaches nearer to C, and in one instance they were the same. This was a case of some months' standing in a child of three years of age. The right deltoid was small and flabby, and the finger could be inserted between the head of the humerus and scapula. This muscle would not respond either to the induced current or to the constant. When one electrode was placed upon the deltoid and the other upon the back of the neck, the resistances were:

CASE 2.

A = 13939 ohms.
B = 4957 ,,
C = 4957 ,,

In all stages of infantile paralysis, except in the very early ones, as we find the resistance C is higher than on the sound side, we are impelled to the conclusion that there must be organic change in the tissues other than mere fatty degeneration, or else that the lumen of the bloodvessels is diminished, and that they are unable to expand properly; or that the dilating vaso-motor nerves are paralysed, and cannot be influenced in a normal way by the galvanic stimulus. It is also extremely probable that more than one of these causes are acting simultaneously. In fatty degeneration, if the other conditions remain the same, the resistance is decreased, because fat is the best conductor of all the tissues, so that in doubtful cases increase or decrease of resistance may assist in forming a prognosis, because the latter is more favourable than the former, as atrophy has not advanced so far. This diminution occurs in the very early stages of infantile paralysis, but is more marked in some cases of musculo-spiral paralysis. As an example, the following resistances were obtained from a case of right musculo-spiral paralysis, when one pole was placed on the nape of the neck and the other over the extensors.

CASE 3.

	Right or diseased side.	Left side.
A =	6966 ohms. ...	6702 ohms.
B =	5070 ,, ...	5070 ,,
C =	3368 ,, ...	3873 ,,

That the cause may be due to some functional alteration in the nerve may be inferred from the fact that in some instances B is much higher on the diseased than on the healthy side; while it can be reduced in the early stages to the same level, C, by means of the galvanic current, on both sides, and this before sufficient time has elapsed for any palpable organic change to have occurred either in the nerve or vessel. This fact I consider as very important, because it shows that the bloodvessels on the diseased side are more contracted than on the healthy side, but that the current dilates them as fully; while, unless a current of weak or moderate strength passing for a short time produces this dilatation of the bloodvessels by paralysing the contracting vaso-motor nerves, instead of stimulating them (of which I do not know of any parallel case), we are obliged to suppose the existence of actively dilating vaso-motor nerves. Besides, it is extremely unlikely that the irritation of the contracting vaso-motor nerves can be the cause of the increased resistance B, owing to its long duration. For my own part, I attribute the contraction of the bloodvessels in the first instance to the impairment of the actively dilating nerves; and should these be eventually proved to have their origin in, or at least to depend upon, the giant cells of the anterior cornua of the spinal cord, we then shall have no difficulty in saying why there should be such a rapid degeneration and lowering of temperature in infantile paralysis, because of the deficient supply of blood to the part. The action of the current seems to depend upon the more powerful effect it has upon the dilating vaso-motor nerves than on the contracting. When we measure the resistance of the affected limbs in old-standing hemiplegia, we find that it is diminished, instead of, as generally occurs in peripheral paralysis, increased. This diminution takes place in glossy skin, or the epidermis may retain its natural resistance; but the structures below the epidermis are those chiefly affected. There is one point especially worthy of notice that in most cases of hemiplegia the resistance on the diseased side is lowered by the galvanic current proportionately as on the healthy side, although it is absolutely less. Another point is that this diminution of the resistance by means of the current takes place with greater rapidity on the affected side, as may be seen by the quickness the current produces redness of the surface. The following example illustrates these points in a typical manner, only the absolute resistances are rather

low on account of personal peculiarity:—E. F——, aged thirty-four years, mother of five children, became hemiplegic one week after her last confinement, eighteen months ago. She is a peculiarly fragile-looking woman. Late rigidity is taking place. The following resistances were observed on the extensors of the forearms:—

CASE 4.

	Right or healthy side.	Left or diseased side.
Epidermis per square inch, before moistening	1959 ohms.	.... 1981 ohms.
Epidermis per square inch, after moistening	125 „	.... 100 „
Tissues beneath epidermis, electrodes being 3 in. apart, before the passage of the current	2353 „	.... 1420 „
Tissues beneath epidermis, electrodes being 3 in. apart, after the passage of the current	321 „	.... 164 „

Here we may safely conclude that the nerves regulating the bloodvessels are unaffected, and that the tissues themselves are the parts diseased.

The next division of my subject is upon the advantages derived from the employment of a galvanometer. We can place one of the electrodes upon any convenient part of the body, not necessarily in the central line, and the second over the nerve or muscle, the irritability of which we desire to know. To ascertain the current flowing at any time the only thing we have to do when using the author's galvanometer is to press down the key and read off the deflection by the scale (which can be done almost instantaneously), and to multiply the number of the division of the scale at which the beam of light rests by ·025 or ·050, &c., according to the shunt used. The result will then be in mille ampères. It is not even necessary to wait until the skin is soaked, because when it is dry we have merely to throw into action a larger number of cells in order to produce a current of the same strength. In the current we usually insert a fluid regulator to act as a fine adjustment. It is well to recollect that until the skin is completely soaked and the current has been passing some short time, if we measure its strength at successive intervals, we shall find it stronger and the muscular contractions more violent, because the resistance of the tissues becomes less and less, and this teaches us that we ought to measure the current by the galvanometer immediately we have regulated its strength. In health, with the exception of the muscles of the face, we find that under most circumstances from 1·5 to 2·0 mille ampères are required to produce muscular contractions with the negative pole upon closing of the current, and from 3·5 to 4·0 mille ampères by the positive pole. For the face about half these quantities. (We omit for special reasons the amounts required in the opening of the current.) In health the only common noteworthy exception to the above is that a stronger current as measured by a galvanometer is necessary by very stout people. To understand the reason for this we must fully realise the following facts:—1st, that the current is strongest just beneath the electrodes, and that it diffuses itself not only in straight lines, but in an infinite series of curves in every direction; 2nd, that these curves would be regular in every direction if the intervening structures were electrically homogeneous, but as this is not the case they follow the law of divided circuits—viz., that the strength of the current in each circuit is inversely proportionate to its resistance. Thus in the body the curves are anything but regular. The following is the main course of the current. The epidermis conducts a very small part of the current either in a straight line or in curves; of the remainder the corium and the subjacent adipose tissue transmit by far the larger quantity, allowing only an exceedingly small portion to react upon the muscle or nerve. The current that arrives at the muscles may be regarded as proved to be very weak, from the fact that when the nerve or muscle is excited directly, either by the insertion of needles or by the electrodes being placed upon them when laid bare, one cell with a very large extra resistance is sufficient to induce very violent contractions. Now, as the proportion of the current which penetrates deep enough to reach the muscle depends both upon the conducting power and upon the thickness of the strata intervening between them and the electrodes, and as a certain strength of current is absolutely necessary to cause muscular contractions, we can readily understand why it is that when the tissues covering the muscles are abnormally thick, or better conductors than usual, a stronger current than ordinary is needed to obtain a response from the muscles.

The question now arises how are we to know whether the muscles are healthy or not, in cases in which the conduction of the overlying structures is such as to prevent a current of the normal strength from exciting them. The answer is that when they do not respond to a current having a strength of from 1·5 to 2·0 mille ampères negative pole and of from 3·5 to 4·0 mille ampères positive pole, we shall find during health they still contract, having the same ratio—namely, about 3 to 7. In disease we consider the ratio of the current strengths requisite to cause positive and negative contractions respectively, as more important than the absolute strengths of the current themselves. I have also observed that in the majority of cases when the muscle regains its power, the currents needed for exciting contractions, with the negative and positive pole respectively, gradually approach the ratio 3 to 7. Although in many cases for some time at least, even if not always, will the strengths of the necessary currents be unlike those wanted before the disease commenced. For an illustration, I will quote a case where the needful strength of the current remained high, although the ratio became natural.

A. B—— fell down and struck his head on the right side, immediately losing the use of his left arm. One month after, when I first saw him, he was able to use all his muscles with the exception of the deltoid. This muscle responded to 4·8 mille ampères – pole and 3·2 mille ampères + pole, ratio being 3 to 1·99. Three days afterwards, and remaining for twelve days, the current required was 6·5 mille ampères – pole and 5·0 mille ampères + pole, ratio being 3 to 2·31. There was during this time some slight improvement. One month later the requisite currents were 5·75 mille amperès – pole and 13·55 mille ampères + pole, ratio being 3 to 6·89. The patient was now so well that he did not return. It is only by the help of a galvanometer that we are able to discover with any degree of accuracy the ratio between the two currents, and certainly without it we are absolutely unable to observe daily fluctuations. Besides, very few batteries are constructed so that single cells can be set into action. Even when they can the valve of a cell varies. First, according to its E. M. F.; second, according to the number of cells already in action; third, according to the resistance of the body. The size and position also exert a very powerful, but not uniform, influence in regulating the third consideration, the only one I shall notice. Suppose that the electrodes are placed so that the body exerts a resistance of 3000 ohms, and taking a battery of Leclanché cells each having an E. M. F. of 1·5 volts, and an internal resistance of 10 ohms, then 10 cells would give a current of 4 878 mille ampères, while if the resistance of the body were 4000 ohms, 10 cells would give a current of 3 656 mille ampères only.

In disease we rarely find that the resistances of the body are alike on the two sides, so that the same cells have different values. For example, let us take Case 3, C. If 10 cells were used on the right side, 11½ (or by the ordinary method 12) cells would be needed on the left for the production of the same current. Here calculations based upon the number of cells would give an error of from 15 to 20 per cent.

In conclusion, there is not the slightest doubt that medical electricity has not made in the last decade the same strides as other branches of electricity, and this can only be attributed to the fact that medical men have neglected the instruments of precision which have done so much for the other branches of the science. Although mathematical accuracy is unobtainable in medicine, yet our motto ought to be "measurement."

Ladbroke Grove-road.

A CASE OF EPILEPSY.

OBLIVIOUSNESS OF DANGEROUS ACTS; MEDICO-LEGAL BEARINGS; VALUE OF PERCUSSION OF THE SKULL.

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THE following observations are largely based on a case which lately occurred in this hospital, of which a careful record was made by my late assistant, Dr. Williams, now of the Denbigh Infirmary. His report is as follows:—

W. R——, aged forty-five, a soldier, was admitted on Jan. 25th, 1882. Five years before admission he had a sunstroke in India. Epileptic seizures set in shortly afterwards,

and recurred at intervals of from a month to six weeks till the time of his admission into the hospital. Under a combination of the bromide and iodide of potassium, half a drachm of the former and ten grains of the latter, thrice daily, the intervals were somewhat prolonged. On Feb. 23rd of this year he had a convulsive fit, which left him irritable and quarrelsome, but apparently quite conscious of all his actions. On the 24th, while in this mood, he suddenly attacked and knocked down an old man who was passing him in the ward, though there had not been the slightest quarrel between them. Next day he denied having struck him, and at the same time said that he had no recollection of anything that happened on the previous day. His whole bearing in saying so impressed me with the truthfulness of his statement. There was no further violence nor recurrence of the fits, but he was unsociable and somewhat obtuse. He complained of pain in the head, especially on the left side and anteriorly. The pupils were slightly dilated. On April 14th slight shivering occurred, and the axillary temperature was found to be 103° F. Headache was severe, and still most pronounced on the left side. I percussed the skull carefully. The patient stated that the taps of the finger did not cause pain on the right side or back of the head, but that they were very painful on the left side, in front of the ear, forward to the middle of the brow. Leeches were applied over the painful region, and mercurial inunction prescribed. The symptoms, however, became more serious, and he died comatose on May 16th.

Necropsy.—There was about an ounce and a half of serous fluid under the arachnoid and in the ventricles; within the dura mater, on the left side, over the entire frontal lobe, and extending downwards to the base, there was a thin organised false membrane, which seemed to have no adhesions either to the dura mater or arachnoid. The brain was firm; the specific gravity of the white substance in the frontal region was 1047.

Remarks.—Much attention has been given by Dr. Hughlings-Jackson and others to the mental automatism which not unfrequently occurs in epilepsy, particularly after attacks of petit mal. In these cases purposive acts are performed, sometimes nearly correct in themselves, but at improper times and places, and without the consciousness of the actors. But there is a condition following such seizures in which the mental defect is even less than that just stated, where consciousness is only very slightly impaired, where there seems only a little confusion of mind, scarcely noticeable to superficial observation. The remarkable feature of this state is that the patients may maintain a conversation, apparently correct or nearly so, and perform acts, of which they have not the slightest recollection a few hours afterwards. This is illustrated by W. R——'s case. He knocked down his fellow-patient without the least provocation, though seemingly aware of what he was saying and doing, both then and afterwards in the course of the day; yet next day he declared, and I believe truthfully, that he had no recollection not only of that act of violence, but also of all the other events of the next few hours. The question suggests itself, 'Had he killed the old man at the time he struck him, ought he to have been held responsible for his death? I think not; at least, not fully so. A few months ago I was engaged as medical witness (case of George Miller) in a trial for murder by an epileptic, in which the accused, like W. R——, declared that he had no remembrance of the fatal act, nor of what happened, for at least half an hour afterwards. The main facts of the case are as follows:—G. Miller, a soldier, who had been in the Egyptian campaign, was discharged on Dec. 30th, 1882, on the breaking up of his regiment in a small town about ten miles from Glasgow. He drank freely in the course of the afternoon, at night reached the city by train, when, being unable to take care of himself in the streets, he was conveyed to the district police-office. There he was able to tell his name, &c., and walked upstairs to a cell with assistance. He was laid on a fixed wooden bed beside another drunken prisoner, who was asleep at the time, and locked up with him about 8.15 P.M. The latter was stated by those who knew him best to be very inoffensive, and not quarrelsome either in drink or out of it. They were seen by the warder five different times at short intervals, the last time being at 10.45 P.M., and always found asleep. Twenty minutes later, when again visited, the accused was sitting at the side of the cell, with his arms crossed, and his comrade in the middle of the floor, lying with his face down, dead. The head of the deceased was fearfully bruised, and some of his ribs were broken. The conclusion arrived at was that the soldier had jumped on him or kicked him to death with his heavy boots. The gaoler stated that the accused said, on being questioned respecting his comrade's death, he knew nothing about it, and while saying so appeared cool and collected, and so correct in every way that, had nothing happened, the officer in charge would have allowed him to go free. He was taken to the bar and formally charged with the crime of murder; the lieutenant on duty testified that he was apparently quite conscious of what was said to him. Thereafter he was removed to a cell, where he spoke for a short time freely about his Egyptian experiences to the officer appointed to watch him, and then fell asleep. He slept soundly for nearly five hours. When he awoke he was told about his crime, but he appeared quite incredulous, and declared that he had not the least recollection of it or of any of the after circumstances. It was ascertained that he had been subject to attacks of petit mal, and that on one occasion he had a convulsive seizure. He had also been convicted of inflicting a severe blow on a woman, an entire stranger to him, who was passing him quietly in the street; he denied all knowledge of this assault also. He had likewise about two years previously made a determined attempt at suicide.

This history points to the fatal attack as having been of an epileptic character. No doubt the prisoner had previously been indulging in alcoholic liquors, but this does not satisfactorily account for his condition when first seen after the homicide. The seeming cool composure and indifference which he then displayed, the failure to realise his position, and the forgetfulness of the act, as well as of the events of the next half hour, all indicated a really imperfect consciousness, even though to ordinary observers he was apparently fully aware both of what he was saying and doing. At the same time the epileptic seizure, which I believe occurred on his awakening from the drunken sleep, was itself probably due to the action of the alcohol on his weak and susceptible brain. It only further remains to be said that the jury found the accused to have been of unsound mind at the time he killed his comrade in the cell, and he was sentenced to be confined in the Criminal Lunatic Asylum during Her Majesty's pleasure.

It is not improbable that the objection may occur to some minds that, after all, the chief actors in both of these cases may not have been so oblivious as they alleged and appeared to be, it being so very much their interest, and especially G. Miller's, to deny all recollection of their criminal acts. Such objectors will, I think, admit that the following case, very similar to the others so far as the mental condition is concerned, is free from that doubt. A gentleman, aged fifty, whom I see occasionally, has been subject to the minor, and much less frequently the major, attacks of epilepsy for several years, the intervals between the seizures varying from a week or two to some months. Though mentally not now quite equal to his former self, he is still active and intelligent, and, what is specially to be observed, possessed of fairly good memory. On several occasions he has had attacks of petit mal when attending to his occupation, and has afterwards found his way downstairs and through busy streets, returning quite correctly to his place of business, but entirely unconscious of all that had happened in the intervals, lasting for from five to twenty minutes. It is not known how far he may have *seemed* intelligent and correct to others while walking in that condition. What I have next to mention is, however, more to the point under consideration, and was told me by his wife, a highly intelligent lady. One afternoon, about four months ago, while he was seated on the sofa at home, she observed by the movement of his lips and of one of his hands, that he had taken one of his "turns." The ordinary medical attendant of the family was sent for, and arrived within a quarter of an hour. By this time the patient was apparently quite conscious, and conversed correctly with his medical friend for about five minutes. About half an hour after the latter had left the house, some reference was made by the patient's wife to the doctor's visit and his instructions, when she found that he had no recollection of his having seen him, and indeed positively insisted that the doctor had not called that day.

In W. R——'s case the exact correspondence between the painful area on percussion of the head and the extent of the false membrane within the dura mater, so far as it could be ascertained, was very striking. Would it not have been warrantable, as my friend Dr. Macewen, of this city, suggests to me, to have trepanned the skull and removed the false membrane? In the light of the necropsy

this might have been done, and with probable advantage, as the irritation due to its presence was, I think, the immediate cause of death. In any future case of a similar kind, in which percussion clearly defines a painful region, I should be disposed to try trephining, in the event of no improvement resulting from ordinary treatment.

As the method of diagnosis by percussion of the skull is still comparatively new, I may mention that there is at present in this hospital a patient in whom it revealed a painful area over the motor region of one side of the brain. He had been long subject to convulsive seizures, mainly unilateral, and has greatly improved since the application of a series of blisters over this region.

Glasgow.

ON THE USE OF

CARBOLISED SAWDUST AS A DRESSING IN ANTISEPTIC SURGERY.

BY H. P. SYMONDS,

SURGEON TO THE RADCLIFFE INFIRMARY, OXFORD.

ONE of the drawbacks of the usual antiseptic dressing is the rapidity with which the discharges come through on the first day or two after operation, often necessitating the redressing of the case within a few hours. To prevent this, and yet not to interfere with the aseptic condition of the wound, is a distinct advantage both to the patient and the surgeon. The material I have used recently in a considerable number of cases is coarse sawdust, soaked in (1 in 10) solution of absolute phenol and spirit of wine, then allowed to dry slightly so that the spirit may evaporate, leaving the sawdust charged with carbolic acid. When used it is enclosed in a bag made of several layers of gauze, and applied outside the deep dressing, the usual external dressing being put over it. The sawdust thus takes the place of the padding of loose gauze which is generally used. Its absorbent power is very great, and it has the additional advantage of keeping up an equable pressure on the divided tissues. I find that fourteen ounces of sawdust will readily absorb about one pint of fluid.

The following cases in which this dressing has been used form a successive series, taken without any selection.

CASE 1.—Amputation through the middle of the arm for disorganisation of the elbow-joint and necrosis of the humerus. The operation was done on July 24th. The stump was dressed at the end of twenty-four hours in order to remove the drainage-tube. On July 30th the dressings were changed and sutures removed. The wound was quite healed, with good union throughout. The patient was discharged from the infirmary seven days after operation.

CASE 2.—A woman, aged sixty-one, with extensive scirrhus of the breast. On August 10th the whole breast was removed, and the axilla cleared of glands. Two drainage-tubes were put in the wound. Dressings changed on the 12th to remove the tubes, and again on the 17th, when some of the sutures were taken out. On the 19th the wound was thoroughly healed, and the patient left the infirmary.

CASE 3.—A man, aged forty-eight. Amputation of forearm for large sarcoma in the back of the hand. Operation done on August 3rd. Drainage-tube removed in twenty-four hours. Wound dressed again seven days after the operation, when complete union had taken place.

CASE 4.—A middle-aged woman, with compound dislocation of the elbow, admitted August 11th. She had a small wound on the inner side of the right elbow. Both bones were dislocated backwards, and the inner condyle chipped off. The joint was dressed antiseptically, a counter opening made, and a small drainage-tube passed through. This was removed in twenty-four hours, and the dressing not changed again for four days. No soaking through took place, and the wound remained aseptic. The highest temperature 99·4°.

CASE 5.—Removal of an adenoma from the breast of a girl aged eighteen. This case occurred in private practice. Drainage-tube removed in twenty-four hours. Dressed again on the seventh day. The incision was quite healed.

In all these cases complete primary union took place without any formation of pus. In only one did the temperature reach 100°, and that on the day after operation, after which it became normal. I have not quoted these cases as being at all remarkable, but merely as common instances in antiseptic surgical practice in which the sawdust dressing was used. Surgeon-Major Porter, in "The Surgeon's Pocket-book," states that he has used sawdust as a dressing in suppurating offensive wounds; but I am not aware that it has been tried, when prepared in the way I have described, in antiseptic dressing. The three points in its favour are its powerful antiseptic qualities when saturated with carbolic acid, its great absorbent power, and its adaptability to any surface. I may add that the sawdust should be coarse, as I find that if it is very fine it passes through the gauze and irritates the skin.

Oxford.

ACUTE RHEUMATISM AND PHTHISIS.

BY J. GORDON BLACK, M.D. LOND.

IN THE LANCET of July 7th Dr. Austin calls attention to acute rheumatism as a premonitory symptom of phthisis, and gives the histories of four cases in illustration. The following particulars of a case attended by me last year may perhaps be of interest in connexion with this subject.

On March 6th, 1882, I first saw a pale, delicate-looking young woman, aged twenty. Both father and mother were dead, the former of phthisis, and a sister was then suffering from that disease. My patient had been doing rough hard work beyond her strength in a cold damp atmosphere, for some months. At the previous Christmas she caught cold and a cough ensued. She had, however, been away from work only two days. The symptoms were on examination:—Short dry cough with pain under left axilla, sickness and vomiting of food, sleepless nights, and free perspiration. Pulse 100, weak, and pupils dilated. Tongue red in middle, furred at the sides. Temperature only slightly above, and respiration, normal. Menses regular, but discharge too pale. Some rough breathing below left clavicle; no dulness or crepitation. No increase of cardiac dulness, but sounds unduly accentuated. At this visit I was undecided as to the exact nature of the attack, fearing some lung mischief or impending febrile disorder. A diaphoretic and expectorant mixture was prescribed and the affected side ordered to be poulticed. Next day I found that the cough and sickness had entirely left her. The pain was still bad in the side, and perspiration continued. Temperature 102°, pulse 100. A soft murmur was now heard with the first heart sound, loudest over the pulmonary cartilage, slightly conducted towards the apex, but not heard over the second right cartilage. The right knee and ankle were swollen and tender. Thus the affection had developed into rheumatic fever, and the signs of lung implication suddenly disappeared. Salicine treatment happily soon gave relief to the distressing symptoms, and by the second day of its use the patient was comparatively well. The cardiac murmur became much less audible, but never went entirely away. At the end of March the patient, being rosy and plump, in complete contrast to her previous condition, was allowed to go to a farmhouse in the country.

On April 17th, a few days after her return, I saw her again, and was shocked at the serious change which had occurred. She was now in bed, complaining of excessive muscular weakness. The cough, fever, and vomiting of food had returned worse than ever. Some dulness was now noted in both infra-clavicular spaces, and at the top of the sternum. Pectoriloquy and mucous râles were heard on the left side below the clavicle, whilst on the right there was double respiration. Expectoration was copious and nummular. Pulse 120; temperature 101°. By April 27th the above symptoms had become greatly aggravated. The expectoration was tinged with blood, and there were signs of a vomica at the top of the left lung. For the next few weeks the disease progressed with the fearful rapidity of so-called "galloping consumption"; but afterwards, curiously enough, became quite chronic. The appetite had never failed, and from first to last colliquative diarrhœa was absent. Thus were the powers of nature sustained until the patient had become a veritable skeleton. Death occurred on the 24th of November.

The succession of symptoms above detailed arrested my attention as being unfamiliar, and I was therefore much interested to observe that Dr. Austin had recently attended four somewhat similar cases. Judging by my own expe-

rience, I should say that acute rheumatism is a rare complication of phthisis. The text-books are almost silent on the subject, nearly every other ailment, however, being mentioned in that category. Under the head of Acute Rheumatism we find no allusion to the existence of a tubercular variety, though others, such as scarlatinal and gonorrhœal, are enumerated. At one time the phthisical and rheumatic diatheses were even thought opposed to each other. The following exceptional reference is made towards the end of the late Dr. Hughes Bennett's article on Phthisis, in Reynolds's "System of Medicine:"—"Pericarditis and other inflammatory diseases may occur, occasionally gout or rheumatism." And from the construction of what immediately follows, one gathers that Dr. Bennett did not consider such complications to bear "an essential or constant relation to phthisis."

Now, such a view seems to me more in accordance with symptoms than Dr. Austin's theory that tubercular deposit in the affected parts is the cause of the rheumatic manifestations. It is noticeable that when tubercle occurs in different organs and membranes during the course of phthisis pulmonalis, it does so as part of a general constitutional affection, with which the local developments do not tend to interfere and which the latter do not mask. It is perfectly different, however, when rheumatic fever intervenes. This seems completely to replace the signs of pulmonary affection by others peculiar to itself, which then have their ordinary course and termination. Further, the well-known tendency of tuberculosis to produce chronic inflammation and ulceration does not accord with the equally familiar temporary and changeful character of acute rheumatism, in which disease ulceration is exceptional. If Dr. Austin's theory were correct, one would look for ulcerative endocarditis or serious disorganisation of joints in cases of phthisis complicated by rheumatism. We know that such results are not uncommon where other specific agents of inflammatory action are present, such as gonorrhœa or scarlatina. Another argument may be adduced from a consideration of the results of treatment upon the phases of disease under notice. The well-known power of salicine to control acute rheumatism, a good illustration of which is furnished by the case related above, contrasts strongly with its utter uselessness in checking tuberculosis. If both sets of symptoms in my case had been due to one general cause—viz., tubercle—then one fails to understand the marked difference observable in the effects of salicine. Considered in connexion with pulmonary consumption, I am therefore inclined to regard acute rheumatism as a somewhat rare accidental complication of the former, to which malady it bears no necessary relation. Although it cannot consequently be properly regarded as "premonitory," yet it is well to remember the possibility of its advent as an early complication. Unless this be kept in view during attendance upon a delicate patient suffering from rheumatic fever, especially where there is a family history of phthisis, a too favourable prognosis may be ventured, to the disappointment of the friends and possible discredit of the medical attendant.

Harrogate.

ON A CASE OF COMBINED SCROTAL AND ABDOMINAL HÆMATOCELE.

BY SURGEON-MAJOR W. GRAY, I.M.D.,
SENIOR SURGEON, JAMSETJEE JEJEEBHOY HOSPITAL, BOMBAY.

Esub E——, aged thirty-six, a cart driver, was admitted to the Jamsetjee Jejeebhoy Hospital on March 6th last, suffering from great enlargement of the right side of the scrotum, and also from what appeared at first sight a distended bladder. The latter belief was strengthened by the fact that there had previously been some difficulty in micturition, and by the additional circumstance that the house-surgeon, on attempting to withdraw the urine, found it impossible to pass even the smallest catheter beyond the bulb. The history, so far as it could be ascertained, was that about a year ago the scrotum began to swell, and gradually attained its present size. A month before admission he first noticed the hypogastric tumour, and it was in consequence of the rapid enlargement of this during the last few days, and the increasing pain and discomfort which it caused, that he came to hospital for relief. The patient was unable to furnish any data that could throw light on the origin of the disease. All he could tell us was that up to a year ago he was in perfect health, and had nothing whatever the matter with either the scrotum or cord. Urine had always been passed freely until lately. He was emaciated and anæmic, passed urine with difficulty, and in a narrow twisted stream, and complained of considerable pain and tension in both swellings. There was no history of injury. The scrotal tumour was cylindrical in shape, about six inches in diameter, and when the patient stood up it descended nearly to the knee. The hypogastric tumour looked and felt, as the patient lay on his back, almost exactly like a case of retention of urine; it reached a little above the umbilicus.

On making a careful and detailed examination the day after admission, when I first saw him, it was noted that both tumours contained fluid, and that they communicated freely with each other. Placing one hand at the bottom of the scrotal tumour, and percussing the hypogastric swelling with the fingers of the other, a distinct wave of fluid was felt to pass. According to the position, too, either tumour could be considerably increased in size at the expense of the other. When he stood up the scrotum filled out, and the abdomen became less prominent; the reverse happened if the scrotum was elevated while he lay on his back. Coughing also made the scrotum swell up. Except this impulse, no evidence of hernia could be detected, either by local examination or from the history. The precise nature of the case was now the question to decide. Standing in front of the patient it was noticed that the hypogastric tumour was in the very slightest degree larger on the right side of the middle line. In fact, the difference was so small as not to be perceptible unless carefully looked for. This fact alone seemed sufficient to cast doubt on the distended bladder theory. Closer examination of the urethra and perineum showed that the obstruction to the passage of urine was due to the pressure of the upper part of the scrotal tumour on the urethra, and on further cross-questioning the patient it appeared that he had been passing, though with difficulty, the normal quantity of urine daily.

It now became sufficiently clear that the case was one of hydrocele or hæmatocele, presumably the latter, which had extended upwards along the cord and under the crural arch, and finally formed a second sac for itself within the abdominal cavity. A small exploring trocar soon showed that the tumour was filled with fluid blood, and a larger trocar and cannula having been inserted, nearly five pints of this were drawn off, and both tumours completely emptied. A large syringeful of 5 per cent. carbolic acid lotion was then injected, the trocar wound carefully closed, and an ice-bag placed over the cord. There was now no difficulty in passing a catheter and removing from the bladder a small quantity of bloody urine. A noticeable circumstance was that the fluid drawn from the tumours possessed a distinctly urinous odour. This fact induces me to think that at one period or other of the case there may have been a communication between some portion of the bladder and the upper sac. Unfortunately, through some misapprehension, the fluid was not examined for evidence of the presence of urine. The blood in the urine withdrawn by the catheter was probably due to the attempts made to relieve the supposed retention: there was no blood noticed afterwards.

By the third or fourth day after the operation it was evident that the tumours were rapidly refilling. Early on the morning of the 12th the patient was found in a state of semi-collapse, with both tumours larger and tenser than ever. Percussion revealed the fact that they were tympanitic, and the hasty conclusion was formed that a hernia had descended, and had become strangulated. More careful examination, however, showed a drop of fetid matter oozing from the trocar wound, when it became at once apparent that the tympanitic note was due, not to intestinal flatus, but to the gases of putrefaction. The patient was immediately placed on the operating-table, chloroform administered with extra precautions, and the scrotal tumour then laid open from one end to the other. A quantity of decomposed blood-clot and fetid matter was turned out, the interior of both cavities thoroughly cleansed with carbolic lotion, and a large drainage-tube was placed in the abdominal sac, with its end hanging out through the scrotal incision. The patient was then removed to bed, and appropriate general and local treatment administered. For some days he remained in a very precarious condition, but eventually rallied, and was able some time later to undergo a second and final operation. The walls of the scrotal sac were fully a quarter of an inch in thickness, and were composed of

tough fibrous tissue. Its inner surface was rough, and in general appearance was not unlike the mucous membrane of the stomach in a case of arsenic-poisoning; in colour it was dark purple. The opening of communication under the crural arch, between the two portions of the sac, was wide enough to admit four fingers or a small hand, and the interior surface of the abdominal sac was felt to be similar to that of the scrotal sac. The source of the hæmorrhage was sought for in vain.

The patient having regained strength, and the parts looking sufficiently healthy, he was, on March 28th, again placed under chloroform, and the redundant portion of the scrotal integument, together with the whole of the sac wall below Poupart's ligament, were excised. As the testicle had atrophied to a mere nodule, it also was removed. The wound was then closed with silver sutures, the drainage-tube of the abdominal sac being brought out at its upper angle. From this time the patient made an uninterrupted recovery; the scrotal wound healed readily, while the upper cavity, which for a time discharged freely, gradually contracted, and by degrees pushed out the drainage-tube. He was discharged well on May 12th, returning to his former avocation of cart driver. I have since had an opportunity of seeing him. The scrotum is of natural size, while the abdominal sac is apparently obliterated, and the sinus quite closed.

I think this case is worthy of publication, both from its rarity and on account of the success of the treatment adopted. I have never seen or heard of a similar case in this country, where hydrocele and hæmatocele are so common. Professor G. M. Humphry mentions a case of "abdominal" hydrocele in his article in the "System of Surgery."[1] Nothing further has been added to this by Mr. Jacobson in the third edition. J. Rochard records an instance of "abdominal" hæmatocele complicated with hernia.[2] Beyond these cases I can find no reference to the subject. The liability, after a cursory examination only, to mistake the present case for one of retention of urine was natural enough, and forms an interesting feature of it. As regards the origin of the abdominal sac, the very unsatisfactory history of the double tumour leaves us more or less in the dark. In the absence of any better explanation I am content to accept that offered by Professor Humphry—namely, the persistence, unclosed except at its upper part, of the funicular portion of the peritoneal pouch which accompanied the testicle in its descent. The gradual distension of the scrotal sac caused the canal to yield where it passed through the abdominal wall, and finally to dilate into a large pouch behind. The patient, however, adhered to his original statement, that up to a year before his admission to hospital he had no swelling of either the scrotum or cord, nor had he sustained any injury of the parts. Still, long experience has taught us that the histories of their diseases given by our hospital patients are, as a rule, more or less incomplete or untrustworthy.

I shall be glad to learn whether readers of THE LANCET have met with cases at all similar to this, and, if so, whether they can throw any further light on its mode of origin and progress.

Bombay.

ON A CASE OF

POISONING WITH BICHROMATE OF POTASH.

BY EDWARD ORR MACNIVEN, M.B., C.M. ED.,
HOUSE-PHYSICIAN IN THE GLASGOW ROYAL INFIRMARY.

B. D——, twenty-two years of age, a workman in Mr. Carlyle's chrome works, was admitted under Dr. Maclaren in the Glasgow Royal Infirmary on Dec. 10th, 1882, suffering from the effects of swallowing a quantity of bichromate of potash.

History.—The patient, a fairly muscular man, in a fit of jealousy went to the chrome works about five o'clock on Sunday evening and swallowed a lump of chrome (the purified salt) in the solid form. He then returned to his lodging, which is about fifteen minutes' walk from the works. As soon as he reached his room he experienced the following symptoms:—The first thing he noticed was a lightness in the head, then a sensation of great heat in the stomach, with a glow of heat all over the body, and this was followed by a cold sweat. Next he became sick, and vomited freely. He then suffered from agonising pain in the epigastric region, with giddiness, specks before the eyes, and loss of power of the legs. (He had complete power of his arms.) His thirst was intense, and he aptly expressed himself, "that he felt as if he could drink the sea dry." Lastly, he complained of severe rigors, with coldness of the whole body, more especially of the extremities.

The patient was carried into the hospital at ten minutes to seven o'clock (nearly two hours after swallowing the poison), and on examination I found the pupils slightly dilated, the face pale and extremely cold, and the pulse feeble and fluttering. There was no vomiting then; but he complained of intense pain over the region of the stomach, and a feeling of great depression. No cramps or diarrhœa were present. There was a degree of stupor, but he answered questions fairly well. Sensibility to touch and pain was well marked.

Treatment.—This consisted in giving a full dose of sulphate of zinc, and washing out the stomach with tepid water by means of the stomach-pump till the fluid was colourless. As the pulse threatened to fail, I injected subcutaneously twenty minims of sulphuric ether, which was followed by a marked improvement. The patient was covered with plenty of warm blankets, and hot bottles were applied to the feet and sides. A mustard poultice was applied over the stomach, which gave great relief. I next tried the administration of some tepid coffee well diluted with milk and plenty of brown sugar. This was rejected at once; but some milk well mixed with a good quantity of lime water and ten grains of subnitrate of bismuth were retained. Barley water was given as a drink, and the patient was ordered milk diet with lime-water. He slept fairly well that night, and in the morning every symptom had disappeared, except a slight soreness of the mouth. Diet was strictly attended to as usual. The patient made a perfect recovery without a single bad symptom.

Remarks.—(1) The first symptom—viz., the lightness in the head, apparently a tendency to syncope—took place fifteen minutes after he had swallowed the poison. (2) Had it not been that vomiting occurred in his lodgings, which happened about twenty minutes after he had taken the poison, and that the patient had taken food about an hour and a half before he entered the works, the effects might have been much more disastrous. (3) Although a good quantity of the poison was found in his stomach, yet the rapid evacuation of its contents, together with the application of tepid water, along with milk, lime-water, and bismuth, tended to soothe the mucous membrane and diminish the chance of inflammatory action. The application of the mustard externally had also a beneficial effect in the same direction. (4) Over two drachms, according to the patient's account, must have been swallowed, and, by a rough analysis of the stomach's contents, I estimated that it contained nearly one drachm of the bichromate. (I made the patient select a piece of the bichromate, which he thought was exactly the same size as that which he swallowed, and then I weighed it, and found it over two drachms.) No trace of the poison was found in the urine with the ordinary tests for its detection—viz., nitrate of silver = red, acetate of lead = yellow, H_2S = dingy green.

As bichromate of potash poisoning is of somewhat rare occurrence, perhaps a brief summary of the leading symptoms of a few cases recently recorded, comparing these with those of the case just described, might be interesting.

CASE 1 (recorded by Dr. M'Lachlan).[1]—Accidental poisoning, in which three drachms were taken dissolved in water, and the first symptom appeared a quarter of an hour after administration:—Symptoms: Excessive vomiting, purging, violent abdominal pains, with cramps in the legs; coldness of the surface of the body. Hands shrivelled, wrinkled, and dusky, like a person in the advanced stage of cholera; face and lips dusky, with yellowness of the conjunctivæ; excessive thirst, feebleness of the pulse, hurried respiration; suppression of the urine; soreness of the mouth; mental faculties unimpaired. Resembling the case I have described in having the following symptoms: Vomiting; abdominal pains; excessive thirst; coldness of the surface of the body; feebleness of the pulse; soreness of the mouth. Differs from it in (1) the following symptoms being absent: Tendency to syncope, with giddiness; specks before the eyes, with slight dilatation of the pupils; degree of stupor; loss of power of

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[1] Vol. v., p. 85, second edition.
[2] Mentioned in the Sydenham Society's Year-book of Medicine and Surgery for 1861, p. 312.

[1] Glasgow Medical Journal, July, 1881, p. 31.

the legs; and in (2) the following symptoms being present: Suppression of urine; purging; hurried respiration; peculiar condition of the face and hands, with yellowness of the conjunctivæ.

CASE 2 (recorded by Dr. R. Archer Warwick).[2]—Intentional poisoning, in which a lump of chrome about half an ounce in weight was taken, and the first symptom appeared in one or two minutes after administration:—Symptoms resembling the case I have described: Pain in the stomach and back; giddiness and vomiting, with violent retching; loss of power of the legs; feebleness of the pulse, and clammy perspiration. Differing from it: Purging, with blood in the stools.

CASE 3 (recorded by Dr. McCrorie).[3]—Symptoms resembling: Vomiting; dilatation of the pupils; feebleness of the pulse; tenderness of the abdomen; coldness of the surface of the body, with clammy perspiration. Differing: Purging; difficult, wheezing respiration.

CASE 4 (recorded by Dr. Dunbar Walker).[4]—Accidental poisoning, in which one drachm was taken dissolved in water, and the first symptom appeared in five minutes after administration. Symptoms resembling: Sickness; tendency to syncope; coldness of the body; pain in the abdomen; feebleness of the pulse. Differing: Purging.

Judging, therefore, from the cases just mentioned, and from those of an earlier date,[5] the symptoms produced with bichromate of potash are those of an irritant poison, and may be described as follows:—

1. General or usual symptoms: Abdominal pains; vomiting; purging; cramps in the legs; feebleness of the pulse; coldness of the surface of the body, with clammy perspiration; soreness of the mouth and throat and excessive thirst. 2. Remote symptoms: Tendency to syncope, with giddiness; specks before the eyes, dilatation of the pupils, and yellowness of the conjunctivæ; suppression of urine; stupor; hurried or difficult respiration; loss of power of the legs.

The accurate experiments on dogs with this substance, performed by Professor Gmelin of Tübingen,[6] are also worthy of note, as illustrating the valuable information to be derived from such investigations.

Lastly, the local effects on workmen who use the bichromate of potash in dyeing, as described by Drs. Duncan[7] and Eadie[8] of Glasgow, are of great practical interest, and illustrate the caustic action of this poison. It seems that on those workmen who have the slightest abrasion of the skin the poison acts as a caustic, producing a tough slough, followed by an ulcer with hardened cup-like border. These sores may gradually extend deeper and deeper, until they eat their way into the bone, and sometimes they actually make their way through the arm or hand altogether. Attacks of conjunctivitis are also of not uncommon occurrence. These observations I can fully confirm.

Glasgow.

CASE OF
CYSTIC TUMOUR OF LEFT OVARY EXISTING DURING SEVERAL PREGNANCIES;
REMOVAL OF BOTH OVARIES, WITH RECOVERY.

BY A. C. BUTLER-SMYTHE, M.R.C.P., F.R.C.S. ED.,
SURGEON TO THE FARRINGDON GENERAL DISPENSARY AND TO THE HOSPITAL FOR WOMEN, VINCENT-SQUARE.

MRS. W——, aged thirty-three, married fifteen years, has had eight children (one premature at the end of the seventh month) and two abortions. The catamenia appeared at the age of thirteen, and up to the year 1877 she had always had good health. There is no history of tumour in her family. She states that five years ago, when about seven months gone with her seventh child, she was coming out of the Victoria station and slipped on some orange-peel and fell, striking the left side of her abdomen against the kerb. She was stunned for a few moments, but recovered, and afterwards went her full time and had a fairly good labour. Some days after her confinement, however, she had an attack of what her medical attendant termed "inflammation of the womb," which laid her up for three weeks. Two months subsequently she had rheumatic fever, and kept her bed for seven weeks. About a year after the fall, when three months advanced in her eighth pregnancy, she noticed on her left side a perfectly movable swelling the size of an orange, and complained of a dragging pain in that side. She aborted at the fifth month, and was attended by a midwife, the abortion being followed by another severe attack of "inflammation." Two and a half years ago she completed her ninth pregnancy, and had a lingering labour. After her delivery her medical attendant found a large swelling in the left side, and diagnosed "an abdominal tumour of doubtful nature." She was told to go to some hospital for further advice, and attended for seventeen months as an out-patient at different London hospitals, but the abdominal condition seems to have been overlooked. In April last, when three months gone in her tenth pregnancy, the pain in her left side became so bad that she fainted on several occasions, and at last took to her bed. During the next four months her sufferings increased to such an extent that she could not lie down in any position, but had to be propped up in bed, or in a chair, in order to procure sleep. She was prematurely confined of a living child at the middle of the seventh month, after a painful and tedious labour extending over two days. Her confinement was followed by increased pain in the left side, which continued to within a week of the operation. She tells me, and her statement is confirmed by her medical attendant, that in her last two pregnancies the child lay in the right side, but more particularly so in the last, when the womb was pushed completely to the right of the navel; and after delivery a distinct hollow could be felt and seen on the right side, whilst the swelling in the left remained almost unaltered. After her last confinement, the tumour began to grow rapidly, and she lost much flesh. Her appetite failed, and her spirits became depressed. Menorrhagia and metrorrhagia were frequent symptoms, and she complained of pressure over the bladder, with difficulty in micturition. The constant pain and loss of sleep had reduced her to such an extent that walking was out of the question, and the slightest exertion produced giddiness and faintness. I first saw her in January, 1883. She was then pale and much emaciated, her features were drawn and pinched, and she seemed too feeble to stand. She complained of a constant dragging and tearing pain in her left side, which prevented her lying down, and kept her awake at night. Further examination showed her abdomen to be irregularly enlarged, and very tender. There was dulness over the front, and resonance in the flanks. Fluctuation could be detected in parts, and aortic impulse was perceptible. The tumour was movable, and seemed pretty solid. On vaginal examination the uterus was found to be enlarged and anteverted, the os was patulous, and the sound passed two inches and a half. The diagnosis was "a multilocular tumour of the left ovary with little fluid." The patient being in such a wretched state of health, I determined to wait till after her next period, and put her on a course of iron, and gave her carbonate of lithia in five-grain doses three times a day, to correct the urine, which was thick and loaded with urates. She rapidly improved under this treatment, but the tumour gained in size. Accordingly, on Feb. 6th, 1883, I performed ovariotomy.

The patient being chloroformed, I opened the abdomen under carbolic spray, and found the tumour free from adhesions on the right side, but on the left there were several long thin bands stretching from the abdominal wall, and in front a portion of the intestine had become attached to the tumour by a thin band which required ligaturing. The contents of the tumour being too thick to pass through the trocar, it was withdrawn, and introducing my hand, I broke down several secondary cysts, but in the end had to enlarge the incision before the mass could be extracted. The right ovary, being enlarged and cystic, was also removed, and the peritoneal cavity well sponged out. The wound was closed with carbolised silk ligatures and dressed with antiseptic gauze. The tumour weighed over twelve pounds.

The patient made a good recovery. On the third day she passed her water voluntarily, and both pulse and temperature were normal. On the seventh the sutures were removed, when the wound was found to be quite closed. On the eleventh day the bowels acted, and before the end of the

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[2] THE LANCET, January 31st, 1880, p. 167.
[3] Glasgow Medical Journal, May, 1881, p. 378.
[4] THE LANCET, September 27th, 1879, p. 464.
[5] Taylor's Medical Jurisprudence, p. 127; Woodman and Tidy's Handy-book, p. 172.
[6] Christison on Poisons, 2nd edit., p. 444; Bulletins des Sciences Méd., xx. 188. (From the Heidelberg Klinische Annalen.)
[7] Edinburgh Medical and Surgical Journal, xxvi., 143.
[8] Guy's Forensic Medicine, p. 510.

third week she was up and able to walk. She is now in good health and has resumed her duties at home.

Remarks.—This case seems to me interesting because it shows that during the development of an ovarian tumour several pregnancies may occur, and end in the birth of living children and in the safety of the mother. The history of injury to the left side seems worthy of some notice, since the patient dates all her troubles from the accident, and further adds that she has never been free from pain in her left side since the time of injury. Considering the number of pregnancies and the history of pain, together with the general condition of the patient before the operation, I was rather surprised at the small amount of adhesions met with in this case. The spray apparatus stopped working just before the wound was closed, and I had to finish without it. In all other respects antiseptic precautions were taken during the operation.

Brook-street, W.

CONGENITAL UMBILICAL HERNIA.

By C. W. ROBINSON, M.R.C.S., L.S.A., &c.,
HONORARY SURGEON TO THE NORTH SHIELDS AND TYNEMOUTH DISPENSARY.

THOUGH umbilical hernia is nothing but a common disease, the congenital form is of very rare occurrence, and operations for the same are still less frequent. The case which I wish to place on record is of the utmost interest in more points than one. First, its great size; secondly, its external appearance; thirdly, the morbid condition of the abdominal viscera, with other minor points.

On the morning of Jan. 16th, 1883, at 3 A.M. Mrs. D—— gave birth to a female child at full time, to all appearance perfectly healthy, with the exception of the presence of an umbilical hernia of unusual dimensions; the size of the tumour slightly exceeded that of the child's head, which was fully developed. At the junction of the tumour with the abdomen a well-marked constriction was noticeable; the contour of the tumour was even and regular, describing the better half of a hemisphere; it was soft, fluctuating, and tympanitic. It was not difficult to be certain of its contents, because a portion of the front of the hernia, about two inches in diameter, was perfectly transparent, and this transparent portion, which formed what might be called a false covering, was composed of a part of the umbilical cord covering, having evidently expanded under pressure, and was simply, as might be anticipated, in continuity with the integument of the abdomen. The appearance was extremely curious; nearly the whole of the small bowel was distinctly discernible, and its peristaltic action seen very perfectly. There was no approach at strangulation; and on an attempt being made at reduction, nearly the whole of the contents of the tumour were returned into the cavity of the abdomen, leaving plenty of loose integument over the site of the hernia—a fact worthy of note, as upon this point rested principally the chances of a successful operation, which, on being proposed to the parents, was readily assented to.

The grounds on which I based my opinion for surgical interference were:—1. The apparently perfectly healthy condition of the child. 2. The certainty of a rupture of the transparent and exceedingly thin integument covering the front of the tumour at an early date. 3. There being plenty of loose integument after a reduction was effected left no grounds for hesitation on that score. After a consultation I fixed the operation for 5 P.M. of the same day, as there was clearly no time to be lost, and there was no other alternative left. The operation consisted in making an elliptical incision just a quarter of an inch outside the transparent portion, first making an incision through the skin; then after a little careful dissection coming down to the peritoneum, which I pinched up with a pair of ordinary dissecting forceps, and cut through into the cavity of the abdomen; next, with a director and an ordinary hernia bistoury I completed the incisions, whereby the elliptical portion of integument above mentioned was removed. When on careful examination of the viscera all hope of a successful issue of the operation was nearly at an end (the liver was intensely congested, and a portion of the intestine, which had not been seen before, was in a gangrenous condition, but not in an advanced stage), I deemed it advisable to return the bowel, which had partially escaped from the wound, to await the result, whether favourable or otherwise. I may mention here that chloroform was administered very carefully by a brother practitioner. This being done, I closed the wound by a continuous suture, and, having dressed the wound with oiled lint, applied a bandage. The little patient died within two hours of the operation. Unfortunately the friends would not allow a necropsy, and the exact cause of the morbid appearances can only be arrived at very imperfectly. It seems a curious circumstance that during the few hours of the patient's existence no external signs, either subjective or objective, were observable. The hæmorrhage was very limited in extent.

Tynemouth.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

WEST LONDON HOSPITAL.

OBLIQUE FRACTURE OF HUMERUS; COMMINUTED FRACTURE OF RADIUS AND ULNA AT LOWER END; DISLOCATION OF ELBOW BACKWARDS; GANGRENE; AMPUTATION AT SHOULDER-JOINT; TETANUS; DEATH.

(Under the care of Mr. BRUCE CLARKE.)

FOR the following notes we are indebted to Mr. W. H. Stacey, clinical assistant.

Ellen T——, aged thirty-eight, was admitted on the morning of August 12th. She had thrown herself from her bedroom window, a distance of forty feet, and had sustained an oblique fracture of the humerus about the junction of the middle and upper third, a comminuted fracture of the lower end of the radius and ulna, and dislocation backwards of the elbow. There were two small skin wounds, one at the elbow and the other on the flexor surface of the wrist. She was a woman of intemperate habits, and was drunk and very noisy at the time of admission. The dislocation was reduced with difficulty, the forearm having first been bandaged to a splint. The arm was placed on a pillow and evaporating lotions were applied. Morning temperature 99°, evening 100·4°.—13th: The patient passed a restless night; the arm much swollen. Temperature, morning 101°, evening 100°.—14th: The arm continues painful, and is much swollen; the swelling extends to the shoulder-joint. The patient rambles and shows signs of delirium tremens. Temperature, morning 102°, evening 103·4°.—15th: The arm much swollen; passed a restless night; delirium tremens much worse; fingers are commencing to be discoloured. Temperature, morning 103·6°, evening 102°.—16th: The fingers and forearm are quite cold, and there is a small dark spot on the radial side; the whole arm is very tense; œdema extends over clavicular region; smell offensive. Towards the afternoon the blackness extended rapidly, as far as the elbow. The smell became most offensive, and it was determined to amputate at the shoulder-joint. Temperature, morning 102·8°. 3.30 P.M.: Temperature rose to 103·2°. Under ether the arm was amputated at the shoulder-joint by transfixion; the subclavian artery being compressed there was very little hæmorrhage. The vessels were tied with carbolised catgut; the wound was washed out with carbolised acid lotion (1 in 40), a large drainage-tube inserted, and antiseptic dressings applied. The patient was rather faint and delirious after the operation, but rallied within the course of a few hours. 8.30 P.M.: There is a good deal of serous oozing; the patient is quieter. Temperature 98°.—17th, 1 P.M.: She has slept from eleven till one. Temperature 98°. 8 A.M.: She has not slept since one; fairly quiet. Temperature 102°. 1 P.M.: There is a little blood oozing from the bandage; temperature 103·4°. 3.30 P.M.: Stump dressed antiseptically. It looks well outside, and was washed with carbolic acid lotion (1 in 40), and dressed. 8 P.M.: The patient complains of feeling low, and is unable to open her jaw. The cervical muscles are in a state of contraction; she swallows liquids with difficulty; there are no twitchings; temperature 101·4°.—18th, 7 A.M.:

Tetanic symptoms continue the same, with the addition that she has occasional slight spasms; she still swallows her food with difficulty. Temperature 100·4°. 11 A.M.: Still continues the same; her face presents an anxious look; temperature 103·4°. 1 P.M.: The patient complains of being sleepy; respires freely; temperature 104°. 5.30 P.M.: She has dozed a little; taken a pint of milk and a pint of beef-tea. Tetanus much the same; no spasm on taking food; pulse 142, feeble. 5.45 P.M.: A quarter of a grain of physostigma faba given. Temperature 104·2°. 8 P.M.: Risus sardonicus is getting well-marked; skin perspiring freely; slight occasional spasms. Pulse weaker and rapid, 150; quite clear mentally; takes nourishment well. Temperature 105°. 10 P.M.: Pulse very feeble, 164; rambles; spasms are no worse. She has a blue appearance around the mouth; restless; is evidently failing; her extremities are becoming cold. Temperature 107°. 10.55 P.M.: Great difficulty in breathing; slight opisthotonos. Struggled and died at 11.5. Temperature in vagina immediately after death, 108·5°.

No necropsy was made on account of the rapid decomposition of the body.

LIVERPOOL ROYAL INFIRMARY.

EXCISION OF A TUMOUR FROM THE STYLO-HYOID REGION; LIGATURE OF THE COMMON, EXTERNAL, AND INTERNAL CAROTID ARTERIES; ABSENCE OF INTERNAL JUGULAR VEIN; RECOVERY; SUDDEN DEATH THREE MONTHS LATER FROM DYSPNŒA; REMARKS.

(Under the care of Mr. RUSHTON PARKER.)

HENRY J——, aged forty-eight, a strong man, of previous good health, was admitted on Oct. 12th, 1880, having an ovoid tumour, about the size of a small hen's egg in the right stylo-hyoid region, apparently involving the sterno-mastoid muscle, or its sheath. There was a much smaller tumour on the opposite side in the corresponding situation, to which, however, attention was not drawn by the patient at this time. On Oct. 19th, under ether, the tumour on the right side was excised through a Y-shaped incision, with the use of the carbolic spray, and all Lister's precautions. A portion of the sterno-mastoid, but not the entire thickness of the muscle, was removed with the growth, which also involved the superior laryngeal nerve, and was intimately adherent to the sheath of the great vessels. The bifurcation of the common carotid artery was thus freely exposed, so the main vessel was tied in two places with carbolised catgut, and cut about an inch or more below its division. The internal and external carotids were similarly dealt with, about an inch above their origin, and the Y-shaped piece of vessel removed. Early in the operation the external jugular vein was doubly tied, and divided, as it was much in the way, and was moreover found to be greatly enlarged, and as thick as a correspondingly large artery. No sign of an internal jugular vein could anywhere be found.

After the operation there was a persistent cough, due, it was supposed, to the loss of his right superior laryngeal nerve; there was a subsequent distressing symptom, but there was no evidence of any disturbance of the intracranial circulation. The dressings were changed daily by the house-surgeon, who reported satisfactorily, but on the seventh, at the visit, they were found to be loose, and as the wound was thus probably exposed, they were removed, and the latter examined. The discharge was perfectly sweet, but there was a little purulent admixture; pulsation could be felt in the common carotid up to the ligature, the knot of which was exposed and wet with pus, while the stump of the vessel was also wet with pus. The wound surfaces were granulating everywhere, except where a few fibrous points, also wet with pus, were seen. The stump of the vessel was now soaked in carbolic lotion, 1 in 20, and afterwards in terebene oil. Every part of the wound was freely treated with the terebene oil, 1 in 5, and sometimes 1 in 10, several times a day, the stump of the common carotid being additionally washed with carbolic lotion once a day. The upper end of the cut external jugular vein showed a plug of purple blood-clot. On the ninth day the pulsation in the tied common carotid appeared to be less distinct, and on the eleventh it had disappeared altogether. On this day the loop of the catgut ligature, white in colour, was drawn away, and nothing was seen of the stump of the vessel beyond it. A purple clot could be seen plugging the artery and peeping out from the granulations.

On the eighteenth day (Nov. 6th), the remains of the ligature, two twisted black ends, that had formed the knot, came away, cicatrisation advanced rapidly; and the patient was allowed to get up towards the end of the same month. He insisted on going home in December, but called and showed himself about Christmas. By this time the wound was all healed, except a small strip of granulations; its base was indurated, but whether from inflammatory swelling or commencing recurrence could not be decided.

Early in January he died suddenly, in an attack of dyspnœa, and, unfortunately, no post-mortem could be obtained.

Remarks.—Before operation the growth was judged to be a sarcoma, situated in the sheath of the sterno-mastoid muscle or in one of the deep fasciæ attached to the styloid process. A similar case had been brought to Mr. Parker by Mr. John Bark at the Stanley Hospital, where the growth was excised, in March, 1877. The wound healed, and the cicatrix remained free from recurrence; but the patient died in the following June, after an attack of jaundice and tumour of the liver. The growth proved to be a round-celled sarcoma, and the death probably resulted from secondary visceral infection and its consequences. Much light was felt to have been thrown upon the present case by the circumstances just related of the previous one; and the opinion formed was entirely confirmed by dissection and microscopical examination. The growth was also a round-celled sarcoma, and its position, in the stylo-hyoid region, one that has been the theme of much speculation with regard to congenital source and developmental causation. It is not intended here to enter upon any such hypothesis, further than to mention their existence side by side with the absence of the internal jugular vein. There was no trace of that vein between the styloid process and the middle of the common carotid artery, and of this fact there is no doubt. There was equally no trace of it in the substance or neighbourhood of the tumour as examined repeatedly after removal. The great dilatation and increased thickness of the external jugular vein was at first supposed to be the result of compression and collapse of the internal jugular by the tumour; but the entire absence of that vein from the region exposed was absolutely certified by examination. Whatever there may or may not be about the tumour attributable to congenital or developmental causes, the abnormal arrangement of the great veins here has the appearance of a developmental error, of which a more exact anatomical account is unfortunately impossible, through lack of a post-mortem examination. Up to the present no record of a similar state of things in the veins of the neck has come to Mr. Parker's knowledge.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.

A CASE OF SPINA BIFIDA SUCCESSFULLY TREATED BY MORTON'S METHOD.

(Under the care of Dr. MARSHALL.)

FOR the following notes we are indebted to Mr. R. P. Forrester, senior house-surgeon.

F. G.——, aged six weeks, was admitted at the end of October, 1882, with a congenital deficiency of the arches of the lower lumbar vertebræ, over which there was a tumour, oval in shape, somewhat translucent in appearance and distended with fluid. The tumour measured three inches and a half from above downwards, and two inches and a half from side to side, and was, the child's mother said, gradually enlarging. The body was fairly well nourished, but the lower limbs were thin and paralysed, voluntary motion being abolished and sensation impaired. The child's head was considerably enlarged, and the superficial veins of the scalp greatly congested. On the 31st the needle of a large hypodermic syringe was passed into the tumour, and between two and three drachms of the fluid were allowed to escape. Half a drachm of Morton's iodo-glycerine fluid was then injected and retained, the puncture being sealed by collodion. The operation did not appear to cause any pain.

Nov. 8th.—The swelling seemed to be unchanged. A small quantity of the fluid was withdrawn and thirty minims of Morton's fluid injected.—16th: The baby had improved in appearance, and could move its legs and feet a little. There was not much difference in the tumour. It was thought, however, to be slightly diminished. One drachm of the fluid was removed and forty minims of the solution injected.

Dec. 1st.—Removed one drachm of fluid and injected one

drachm of the solution.—22nd: Tumour shrunk and flat. Skin hard and wrinkled. One small portion at upper part still thin and translucent. Head much increased in size; left side larger than right. Bones and sutures very widely separated. Superficial veins much congested. Injected forty minims.—29th: Spina bifida quite cured. Hydrocephalus still increasing. Left hospital and was not brought back.

Remarks.—This was evidently a very unfavourable case for operation, and the treatment was begun, and for a time carried on, with little hope of success; but so far as the spina bifida was concerned, the result was perfectly satisfactory.

SUNDERLAND INFIRMARY.

SCIRRHUS OF RECTUM; COLOTOMY; RECOVERY.

(Under the care of Mr. HOPGOOD.)

FOR the following notes we are indebted to Mr. J. Whitehouse, house-surgeon.

Mrs. M——, aged forty-eight years, was admitted on April 11th, with urgent symptoms arising from obstruction of the bowels.

About twelve months before admission she complained of severe pain in the left groin, which was pretty constant. About the same time she experienced difficulty in defecation, and the stools were thin and small. Her pain was not increased during defecation. She did not pass any blood per rectum. A month prior to her admission the difficulty of defecation increased rapidly, and she could get no relief from aperients, which she had been accustomed to use freely.

On admission she was in severe pain and seemed utterly prostrate. On percussion of the abdomen there was a little anterior resonance, but dulness existed everywhere else; the abdomen was extremely tense. On examination of the rectum there seemed complete obstruction to the passage of the finger three inches from the anus. The obstructing mass was hard and irregular.

On April 12th Amussat's operation was performed. The descending colon was easily found, and was much distended with fæces. An hour after the operation a tremendous amount of excreta passed through the wound, giving the patient complete relief. Evening temperature 100·4°; pulse 88.—13th: Temperature normal, felt well, no sickness; evening temperature 101·6°.—15th: Had a little pain in the left inguinal region, bowels acted freely; temperature 101·4°; she was prescribed small doses of opium and aconite.—16th: Feet all right again; pulse 86, took her milk well.—19th: Wound gaped a little at its posterior extremity, otherwise looks well, union with the skin complete. After this the patient continued to improve rapidly till May 8th, when she was able to walk, and was dismissed.

Two months after the operation she was well and able to walk three miles with ease.

Medical Societies.

ACADEMY OF MEDICINE IN IRELAND.

AT a recent meeting of the Surgical Section, a paper was read by Mr. THORNLEY STOKER on Removal of the Thyroid Gland in Cases of Bronchocele. He detailed the case of a boy on whom he had himself operated, the disease being the most extensive of which he could find any operative record. The tumour extended nearly from ear to ear and hung down nearly as low as the navel. He removed two-thirds of the mass, comprising the right lobe and isthmus, in March, 1882, and the remainder, on the left side, a year later. Complete recovery followed the first operation; but the patient died five days subsequent to the second, from pulmonary thrombosis. He was incompletely cretinish, but developed greatly after the first operation. Mr. Stoker considered that the ablation of the thyroid gland for disease should be held justifiable, the patient so desiring, not only in cases where the disease threatened life, but where discomfort or disfigurement existed and minor treatment had failed.—Dr. R. MCDONNELL said he was present on both occasions. The first operation might be regarded as quite successful, and taught the lesson that in cases of the kind the operation was justifiable. The second had a fatal issue, from a cause not necessarily connected with the operation.—Mr. CORLEY stated that in his hospital practice some years ago a similar case arose, where the pressure of a large thyroid gland became so great as to render operative interference necessary. He did not think Mr. Stoker had placed sufficient emphasis on the magnitude of the operation.—Dr. H. KENNEDY drew attention to the treatment of thyroid tumours by the seton, and mentioned a case in which at the end of some months the disease was entirely cured. Such a measure as that would be more justifiable in the first instance than the terrific operation described by Mr. Stoker.—Mr. THOMSON thought, whatever use the seton might be in some cases of small thyroid tumour, it would have been useless in Mr. Stoker's case, in which the vessels were of enormous size.—Surgeon-Major HAMILTON remarked that 10 or 15 per cent. of the population in the Himalaya valleys suffered from bronchocele. Sometimes twenty or thirty coolies might be seen climbing mountains 2000 to 3000 ft. high, carrying heavy loads, 50 lb. or 60 lb. in weight, and each having a tumour. Rubbing in biniodide of mercury ointment with a spatula as they lay on their backs in the sun always relieved. The great benefit seemed to be derived from doing it in the sun. He had seen many cases so treated, and had not known any of the men to die from it. In the Himalaya valleys syphilis was supposed to be the cause, and the people lived on inferior food in overcrowded, dirty, and badly ventilated houses.—Dr. FOY instanced the case of a woman, aged twenty-two, who had a very rapidly growing thyroid tumour, which caused her inconvenience both in breathing and swallowing. It became urgently necessary to do something, and he applied a blister on the back of the neck with the best result. A seton was subsequently inserted, and the gland in a short time assumed its normal size.—Mr. STOKES endorsed what Mr. Stoker had said regarding the inutility of using any mild measures in such cases as he had described; but in those referred to by Dr. Kennedy, Dr. Foy, and Surgeon-Major Hamilton, the tumours were probably of extremely simple structure. He recollected two cases in which merely tapping, followed by a weak solution of tincture of iodine, sufficed. The employment of setons found little favour in his eyes. In Mr. Stoker's case nothing short of the very heroically performed operation adopted would have given the patient the slightest chance of recovery. The introduction of air into the veins was avoided by the application of the double ligature and dividing the veins between them.—Dr. BENNETT did not suppose any surgeon would propose to operate, knowing that if the epidemic influence, or the particular exciting cause, such as pregnancy or menstruation, was past, the tumour, troublesome and dangerous at the time, would become quiescent or even disappear. The point that struck him as difficult of explanation was, how it was possible to make the tumour disappear by biniodide of mercury. It would be interesting to know whether such treatment was successful in the case of Europeans in India, or was the success confined entirely to the natives? He was inclined to think, however, that the result of exposing a European to the sun for a sufficient time to cure him of the goitre would be to kill him. The great desideratum was to diagnose exactly the kind of tumour that ought to be the subject of removal.—Surgeon-Major HAMILTON observed that it was the smaller tumours which were often radically cured. Europeans were treated for enlargement of the glands the same as the natives. The only danger was from sunstroke, but this was avoided by placing the upper portions of the body in the shade.—Mr. WILLIAM STOKER mentioned that similar treatment was the rule in Switzerland.—Mr. WHEELER said that no one would think of extirpating the thyroid gland for enlargement due to anæmia, or the thyroid enlargement of menstruation, or what might be termed the cystic bronchocele; but he was of opinion that bronchoceles of large size, and when very chronic, if causing dyspepsia, dysphagia, pressure on the jugular vein, or vertigo, ought certainly to be removed. He did not think that the rays of the sun were essential to act on the biniodide ointment; the heat of the fire would answer very well.

Mr. SWAN read a paper on the Primary Consideration of Orthopædic Cases. He explained certain allusions to affections not strictly to be termed orthopædic by stating that they very frequently were seen by surgeons practising that branch of surgery. From a prolonged observation of a

limited number of examples made by himself, and from the results obtained from the records of Dr. H. Cuthbertson and Dr. Virgil Gibney, of New York, he arrived at the following conclusions:—(1) That the advantages of excision or evitement in tarsal caries do not appear to be so obvious as to warrant their frequent application; (2) that, as there is no evidence of amyloid degeneration of viscera in long-continued suppuration of the tarsal joints, conservatism in its widest signification may be specially applied to disease of this structure; (3) that an anchylosis of the tarsal articulations, a result of the generation of plastic material during the course of the disease, will occur, but that this process, though diminishing the mobility of the foot, will leave it fairly useful. In referring to angular curvature of the spine, the impossibility of predicting the amount of deformity was maintained. The supervention of paraplegia, on the other hand, might be confidently anticipated to occur only in caries of the cervical or upper dorsal vertebræ. So far as the paralysis was concerned, the prognosis might be stated to be usually favourable. The probability of the development of abscess was shown to be chiefly the results of motion, and not necessarily the sequence of extensive gibbosity, or even extensive implication of tissue. Scoliosis was stated to be, except in an early stage, an incurable affection. In equino-varus section of all resisting structures was insisted on, and relapses were said to be often due to a neglect of this rule. Mere congenital distortions of the feet were divided into—(1) those the result of nervous lesions; (2) those depending on ligamentous relaxations; (3) neuro-mimetic affections; and (4) those of traumatic origin. In the treatment of deformities of the lower limbs depending on essential paralysis as usually adopted, whether by counter-irritation, localised galvanism of Duchenne, massage, or the Swedish movement cure, the writer did not put much faith, but held a strong opinion on the utility of the direction of volition to the limb, while by proper means maintaining symmetry, holding that the development of the use of the unaffected muscles even remotely attached to the member established a compensating power and believing that in many cases some of the fibrillæ of muscles, the bulk of which were paralysed, retained contractile power.—Mr. WHEELER was of opinion that Mr. Swan was not sufficiently explicit in his paper with reference to the disease of bones of the foot, and the excision of bones, &c. A tolerably accurate diagnosis of the extent of the disease could be formed by observing where the disease commenced. There were four distinct synovial sacs in the foot. Hence it would be easily understood that the extent of the disease would be greatly influenced by its starting-point. Complete excision of the os calcis was not a common operation. The results in two cases he had were most satisfactory; a third, however, was not quite so successful. He deprecated the use of the gouge as a dangerous and unscientific practice, especially in disease of the ankle-joint.—The PRESIDENT remarked that the partial removal of carious bone was exceedingly unsatisfactory. Although Mr. Wheeler had condemned gouging, his experience of it had been attended with marked success.—Mr. SWAN replied.

At a recent meeting of the Medical Section, Mr. STOKES read a paper on the Therapeutic Value of Nerve-stretching in Tabes Dorsalis. He commenced by pointing out that the evidence afforded by the cases of tabes dorsalis treated by nerve-stretching indicated the fact that relief from some of the most distressing symptoms of that disease may, if the operation be performed sufficiently early, be anticipated. He considered that the absence of a physiological explanation as to how the operation acts is no reason for its rejection, and gave instances of other operative procedures of which the *modus operandi* is as yet unexplained. The particulars of two well-marked examples of the disease treated by him, in one of which he stretched the sciatic nerve on one side, and in the other on both sides, were then given. Although the operations were not followed by any signal improvement in motor power, the results in other respects, as regards relief from lightning pains and vesical irritability, and return of sensibility in certain regions of anæsthesia were satisfactory and encouraging. Then Mr. Stokes discussed the importance of estimating accurately the amount of force that should be used, and was of opinion that a very moderate amount is sufficient to obtain the desired therapeutic results. He also stated his belief that many of the recorded failures of the operation were to be attributed to the employment by the surgeon of an undue amount of force. He advocated the use of an electric cord and dynamometer in nerve-stretching, and believed that in the case of the larger nerves a force of about 10 lb. would be found sufficient.—The PRESIDENT did not see why they should pass over nerve-stretching merely because they did not understand the *rationale* of the treatment. He thought the procedure would apply to nervous functional affections, such as sciatica.—Dr. DUFFY said there was no doubt that the operation gave a certain amount of relief to some of the distressing symptoms of the disease. Ceccherelli, in giving an analysis of 100 cases of nerve-stretching for various conditions, had described certain pathological changes where the operation had been followed by extravasations or regenerative changes affecting the vessels of the nerves, which, he presumed, tended to diminish the sense of conductivity of the nerve. The amount of traction was so great as to affect the cord directly. Some observers believed in certain changes having taken place in the cord itself. In favour of this view nerve-stretching on one side of the body might relieve symptoms referable to both sides.—Dr. C. J. NIXON considered that the operation of nerve-stretching in this disease should only be used in desperate cases, after all other means of giving relief had failed.—Dr. H. KENNEDY thought that slightly pinching the nerve, and thus conveying irritation that could not injure its substance, might have a beneficial effect.

Dr. M'SWINEY read the notes of a fatal case of Thoracic Aneurism occurring in a sailor, who had worked at his employment up to within one month of his death. The aneurism was not diagnosed during life, as there were no signs or symptoms present specially characteristic of the disease. The man was supposed to have got cold from exposure during bad weather. He had cough, bronchial râles, and pain in the region of the heart. Physical examination threw no light on the nature of the case. The patient expectorated nine or ten ounces of bright-red blood and died in a few hours afterwards. At the necropsy the aneurism was found to spring from the posterior and outer aspect of the descending portion of the arch of the aorta, and to project into the upper and inner parts of the left division of the thorax, a portion extending across the vertebral column, eroding the bodies of the third, fourth, fifth, and the upper part of the sixth dorsal vertebræ, and lying in the upper and inner portion of the right division of the thorax. The third and fourth ribs on the left side had been eroded, and the tumour had passed backwards between them a short distance. The entrance into the aneurism was about as large as a sixpence, and a quarter of an inch below it a little pouch was formed in the site of the origins of the first pair of intercostal arteries. This was evidently the beginning of a second aneurism, the aorta being in this position very much diseased. The arch and thoracic portion of the aorta were atheromatous, as were all the valves of the heart in varying degrees. The bronchi and œsophagus showed no signs of pressure. The thoracic duct could not be found, but large lymphatic vessels connected with glands lying at the sides of the dorsal vertebræ were to be seen. The sac was filled with laminated fibrine, and was covered with a quantity of tough matted tissue. The aneurism was therefore diffused. A few fibrous strings were to be seen at the upper portion of the pericardium, but no signs of pericarditis on any other portion of the pericardium. The lower lobe of the left lung at its superior posterior part had become adherent to the aneurism, which had here burst into it. There was a cavity in the central portion of the external part of the lobe, which was covered only by pleura. The costal pleura was thickened on both sides, and on that portion nearest the tumour the deposited lymph had undergone fatty degeneration.—The PRESIDENT could not agree that symptoms were quite absent.—Dr. FINNEY drew attention to the absence of hypertrophy of the left ventricle, notwithstanding the size of the aneurism, which confirmed Stokes's observation on this point.—Dr. C. J. NIXON related a similar case of fatal aneurism, in which the only symptoms present during life were those of severe bronchitis.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES.

Mrs. Elizabeth Barlow, late of Ealing, bequeathed £200 to St. Mark's Hospital for Fistula, and £100 each to the Brompton Consumption Hospital, the Victoria-park Hospital for Diseases of the Chest, and the Lock Hospital, Harrow-road.—Mr. Samuel Morley, M.P., has given 100 guineas to the Consumption Hospital, Ventnor.—Mr. J. C. Jesse has given £100 to the Sussex County Hospital, Brighton.

Reviews and Notices of Books.

Indian Snake Poisons: their Nature and Effects. By A. J. WALL, M.D. Lond. London: W. H. Allen and Co. 1883.

THIS work contains a record of a careful experimental inquiry into the action of the poison of various venomous snakes in India. Every effort to increase our knowledge of this subject, with the view to suggest the best means for dealing with what is really a very serious plague, must be welcome, and we are pleased to find the subject so ably treated as it is in this book. The inquiry, which was conducted under the auspices of the Indian Government, has been thoroughly executed. Separate chapters deal in turn with the physiological effects of the poison of the cobra (Naja tripediana), the Russell's viper (Daboia Russellii), and the colubrine snakes, Bungarus fasciatus and Bungarus cæruleus, the action of the poison in each instance being noted as regards its local effect, its action on the nervous system, on respiration, circulation, secretion, and the special senses. Dr. Wall lays considerable stress upon the character of the local effect as determining the venomous nature of a snake-bite. The severe pain and the rapidity with which intense local inflammatory action supervenes, are points of great importance in the distinction, the character of the bite itself not being sufficient to establish it. The importance of this is evident when we see that some cases of snake-bite which are not poisonous have been treated as if they were, sometimes with the most disastrous results to the patient. Moreover, the only chance of saving life after a venomous bite depends generally upon a very prompt recognition of its nature.

The scope and plan of the work may best be illustrated by a brief analysis of the first chapter, that which deals with cobra-poison. It opens with the description of a fatal case of cobra-bite in man. The first symptom was burning pain in the region of the bite, small punctures over the deltoid, and within a quarter of an hour pain shooting towards the throat and shoulder, and a sense of intoxication; next increasing paralysis of the legs, and salivation; then moaning, acceleration of pulse and respiration, inability to answer questions, but retention of consciousness. No relief was obtained by injections of ammonia, first into the basilic, then into the jugular, vein. The breathing became more laboured and slower, and death, which was not preceded by convulsions, took place in one hour and five minutes after the infliction of the bite. Accounts of experiments on dogs, fowls, and frogs follow, and it is pointed out that the length of interval between the inoculation and the occurrence of constitutional symptoms depends on the seat of the wound and rapidity of absorption of the poison. Separate and detailed consideration is then given to the action of the poison on the nervous system, and on the respiration, the latter being illustrated by tracings of the respiratory curve, which show very effectively the degree and character of interference with this function. Dr. Wall is of opinion that the poison acts upon the nerve-centres, and not merely on the termination of the motor nerves, and that the symptom of paraplegia generally precedes that of glosso-labial paralysis and paralysis of the respiratory centre, the latter being often preceded by increased stimulation of the centre. No marked effects are produced on the circulation, on temperature, or on the special senses, and salivation is the chief symptom of interference with the function of secretion. The blood does not seem to be specially affected; for if the sufferer can get over the serious nervous disturbance his recovery is certain. Much the same plan is followed in the description of the Daboia poisoning, and it is interesting to note how the venom of this viper causes almost immediate convulsions, which are followed by a general paralysis, and does not have so marked an effect on respiration at first as the cobra-poison has. The occurrence of albuminuria and of hæmorrhages from mucous membranes goes to show that the Daboia poison has more action upon the blood. A third chapter is devoted to the poison of the Bungarus, and a fourth to a discussion of the relative power and properties of the poison of Indian and other venomous snakes.

The author then discusses the nature of snake-poison generally, and shows that its essential power resides in its chemical composition, and probably in an albuminoid substance. He gives the results of experiments showing the effect of mixing certain substances with the poison, as sodium hyposulphite, carbolic acid, ferrous sulphate, chlorine, sulphurous acid, zinc chloride, and permanganate of potash, a procedure which delays the operation of the poison, and in the case of the last-named completely arrests it. Unfortunately the result of using the permanganate as an antidote is not so successful, since it is of course a very different matter to inject this salt into the blood than to mix it with the poison outside the body. And the same is true of the caustic alkalies, which also possess the power of destroying the poison outside the body. Accordingly we are not surprised to find in the chapter on treatment the injunction laid down to practise excision of the seat of the bite. As in more than 90 per cent. of the cases the bite is on one of the extremities, the plan suggested is to apply an indiarubber band to the limb, as in the use of Esmarch's bandage; then to make an incision through the tissues in order to be certain from the appearances of effusion and hæmorrhage that the bite *is* a poisonous one (the extremely irritant nature of snake poison producing very rapid local effects on the tissues), and if this be the case to excise the part freely, and to wash the wound thoroughly with chloride of zinc or permanganate of potash. But no reliance is to be placed on antidotes given after the arrest of symptoms. Some suggestions upon the extermination of venomous snakes conclude the work, which abounds in sensible, practical remarks.

The Filaria Sanguinis Hominis. By PATRICK MANSON, M.D., of Amoy, China. London: H. K. Lewis. 1883.

DR. PATRICK MANSON has rendered some service to the medical profession at large by the publication in one small volume of the gist of certain papers which have been chiefly published in the *China Customs Gazette*, and which have been from time to time given in abstract in THE LANCET. Although the profession, both at home and abroad, have thus become acquainted with the main facts, yet there can be no question that the present book, in which the various incidents are orderly arranged in a collective form, will be welcomed by all who take an interest in the welfare of their science. Ten well-executed plates illustrate the text, and thus the value of the compilation is proportionately enhanced. The pathological significance of the Filaria sanguinis hominis, the relation of the parent parasite to the lymph channels, and the mode of production of the elephantoid diseases are thoroughly explained. "Filarial periodicity" is described, and various observations tending to clear up the nature of this phenomenon are introduced. Charts representing the effects of day-sleeping and night-watching in inverting filarial periodicity are inserted.

The third chapter discusses the destiny of the embryo filaria parasites not removed from the blood. This is a very interesting and still moot point. A number of statistics and observations were made with the view of ascertaining (1) the degree in which the general population of Amoy is affected with the Filaria sanguinis hominis; (2) the influence of age, sex, and occupation in determining the presence of the parasite; and (3) the morbid conditions, if there are any, with which it is associated. It was found that about 1 in 11 individuals were filaria-infested. From youth to old age

the liability to filaria gradually rises from 1 in 17·5 to 1 in 3. This is to be explained, partly at least, by the fact that the parent worm lives a long time, often a very long time, so that old age not only has its own liability to fresh infection, but possibly inherits the worms of youth and middle age. Nothing definite can be said in reference to sex and occupation. Another table is given showing that elephantiasis and allied diseases are much more frequently associated with the blood parasite than is any other morbid condition.

The chapter on the clinical evidence of the parasitic nature of the elephantoid diseases is replete with valuable knowledge. A parent filaria residing in an afferent lymphatic aborts its ova, which in this premature stage, owing to their size, cannot pass the next lymphatic glands, but on arriving there block the lymph flow, on which ensue all the phenomena of elephantiasis, lymphorrhœa, lymph scrotum, chyluria, and so forth, according to the region affected. Briefly put, that is Manson's theory. A form of endemic hæmoptysis met with in Formosa and Japan has been found to be associated with the presence in the sputa of ova having an oval shape and an operculum at the broad end, from which the bilaterally symmetrical ciliated embryo escapes. These ova belong to a new species of distoma, named after Dr. Ringer of Tamsiu. Ligula Mansoni is the name of a parasitic worm found in the subperitoneal connective tissue and elsewhere, but having no known pathological significance. In the last chapter the relations of Tinea imbricata, which affects the rete Malpighii of the skin, to the common ringworm and to chloasma, are discussed. Dr. Manson looks on the T. imbricata as intermediate between the T. circinata which infests the most superficial layer of the corium, and T. versicolor, which spreads in the horny layer of the epidermis.

OUR LIBRARY TABLE.

Labour among Primitive Peoples. By G. J. ENGELMAN, M.D. Second Edition. St. Louis: J. H. Chambers and Co.—This work treats of the customs and practices observed in connexion with pregnancy and labour by peoples of all races and at all times, in so far as they are known. It is divided into five chapters. The first gives a general account of these customs, and has for its heading "Pregnancy, Parturition, and Childbed." It is the poorest and least carefully written part of the book, and it shows everywhere traces of haste and evidences of having been written under pressure. It contains a large amount of information with regard to the subject of which it treats; but it is ill-arranged and ill-digested, and it is not possible to estimate its value, inasmuch as the author does not give the authorities for his statements or the sources of his information. We feel sure he could make this chapter much more readable and of much greater value. The second chapter treats of posture in labour, and is the best and fullest in the work. The amount of information it contains is very large, its sources and authorities are carefully given, and it is liberally illustrated by good cuts of scenes from amongst various nations. It is impossible to give in a review an adequate idea of the contents of this chapter, but the author arrives at some practical conclusions which we may briefly summarise. He maintains that during the early stages of labour the patient should be permitted more freedom in her movements than is customary; she should be allowed to assume the position most in accord with her own comfort; the dorsal decubitus is an undesirable position for ordinary confinement. "In ordinary labour cases the expulsion of the child should be expected in an inclined position; kneeling, squatting, or semi-recumbent in bed, on the chair, or on the lap. Of these positions the semi-recumbent is the most serviceable, and should be adopted as the obstetric position in all ordinary labour cases; it is preferable to kneeling or squatting." There is much to be said in favour of such a position, in addition to the fact that it is assumed by the great majority of uncivilised races, and there is nothing in it more offensive to feelings of modesty and refinement than in the dorsal decubitus. The third chapter treats of the methods employed to expel the placenta and the customs observed in its disposal. The fourth gives the history of expression and massage as used in labour; and the fifth gives some interesting scenes among the yellow, black, and red races. The book is full of interest, and is a valuable addition to the literature of the history of midwifery.

Tables of Materia Medica: a Companion to the Materia Medica Museum. By T. LAUDER BRUNTON, M.D., F.R.S., F.R.C.P., Examiner in Materia Medica in the University of London, late Examiner in the University of Edinburgh and the Royal College of Physicians, London. New Edition. London: Macmillan and Co. 1883.—These tables, if used as they are intended to be used—simply as a guide to the Materia Medica Museum,—will be invaluable to students. Their arrangement is excellent, and is a great advance on that usually adopted in the text-books on the subject. For example, instead of taking the acids in alphabetical order, and beginning with acetic acid, sulphuric acid is considered first, because it is used in the preparation of all the other acids, and thus comes to be present in them as an impurity, besides conveying into them the impurities, such as arsenic, contained in itself, or contaminating them by sulphurous acid, the product of its decomposition. For a similar reason the oxide of a metal is not considered first and its salts afterwards, but the compound is taken first from which the others are prepared. Thus, instead of taking magnesia first, then the carbonate, and lastly the sulphate, the sulphate is taken first, because it is prepared from crude dolomite or native carbonate of magnesia and lime; next the carbonate which is prepared from the sulphate by precipitating with carbonate of soda; and lastly, magnesia which is prepared from the carbonate by calcining it. In his new edition Dr. Brunton has made several useful additions, and has done much to help students, by giving a list of substances likely to be confounded together, with directions for distinguishing them. For some time past, he tells us, he has given papers containing questions on materia medica to those attending his lectures, and it has appeared to him that they were thus enabled to find out more easily what they knew and what they did not know, and consequently to supply their deficiencies. In the hope that these questions may be generally useful, he has appended them to the present edition, and there can be no doubt that they will serve a good purpose.

The Human Brain. Histological and Coarse Methods of Research. By W. BEVAN LEWIS, L.R.C.P.Lond. London: J. and A. Churchill. 1882.—This work is one which will be found very useful by the morbid anatomist. It consists in a detailed and systematic description of the methods of examination of the brain in the post-mortem room and the histological laboratory. The first chapters deal with the membranes of the brain, and its arterial system; and after these the physical properties of the grey and white matter are dealt with as regards (1) consistence, (2) colour, (3) volume, and (4) weight. The external aspect and internal structure of the organ next receive attention, and this part of the subject closes with a chapter on the superficial topography, illustrated by photographs, Professor Turner's nomenclature of the convolutions being the one adopted. A valuable appendix to this part consists in a list of synonyms from Ecker adapted to Turner's nomenclature. In the second part full instructions are given upon histological methods, the various processes for hardening the tissue, preparing sections, and staining, being entered into with a detail hardly to be found in any other work. The book is essentially

one for practical work, and it strikes us as most admirably adapted for its purpose. The author evidently writes from a full personal acquaintance with the subject, so that every confidence may be placed in his directions.

Illustrated Medicine and Surgery. Edited by GEORGE HENRY FOX, M.D., and FREDERICK R. STURGIS, M.D. Vol. II. No. 2. New York: E. B. Treat.—The editors of this illustrated periodical continue to publish a great variety of interesting cases in each number. In the one before us we find a case of enchondroma and cases of intellectual monomania with mental depression, trichophytosis barbæ, rupture of the choroid, syphilitic stenosis of the larynx, multiple sarcoma of the skin, and a case of deformity of the lower eyelid with an account of the operations performed for its relief. The illustrations are in all fifteen in number and are good. Some of the reports, however, are notably incomplete: thus, for instance, in the first paper we find no proof that the tumour described and figured was enchondroma; the description of the case of sarcoma is defective in the same way, and a plate of the trichophyton tonsurans would have greatly added to the value of Dr. Piffard's paper on Mentagra. The editors might with great advantage give attention to this point.

Practical Histology and Pathology. By HENEAGE GIBBES, M.D. Second Edition. London: H. K. Lewis. 1883.—The large and increasing body of histological students will hail the appearance of a second edition of this useful, practical book with pleasure. The author has by his own unremitting application to the subject obtained for himself a reputation in the art of preparing and mounting histological specimens second to none; and whoever has occasion to consult this work will know that every instruction is based on wide personal experience. In this second edition Dr. Gibbes has wisely extended the scope of the book so as to include all the methods which recent experience has proved to be of value in the preparation and exhibition of the minute structure of normal and morbid tissues; and he has added full directions for the preparation of specimens of bacteria, in the search after which so much of the pathology of the future lies. We can heartily recommend the work, and safely say that no histological laboratory should be without it.

The Mother's Guide; the Management and Feeding of Infants. By ARMAND SEMPLE, M.B. Cantab. London: Kimpton. The gross ignorance that prevails amongst a large section of the public relative to the management and feeding of infants is most lamentable, and it is not too much to say that if more care and judgment were exercised in these respects the fearful mortality that at present exists amongst them would be largely reduced, and the lives and constitutions of the survivors rendered more happy and robust. Therefore a reliable work published at a small cost like the one before us supplies a great want and performs an important service. Mr. Semple has brought the results of a large and sympathetic experience to bear upon his subject, and mothers will find many useful hints, recipes, and directions for their guidance which they are sure to appreciate. The chapters on sanitation, dietetics, and the causes and domestic treatment of the various forms of dyspeptic and catarrhal disorders of the intestinal canal so common in infancy are especially valuable. Popular terms have been judiciously selected, and the scope and style of the work are intelligent, lucid, and concise.

Materia Medica: a Manual for the Use of Students. By ISAMBARD OWEN, M.D., Lecturer on Materia Medica and Therapeutics to St. George's Hospital; Assistant-Physician to the Hospital for Consumption and Diseases of the Chest. London: J. and A. Churchill. 1883.—This little book, we are told, has no pretensions to be considered an original or complete treatise on materia medica, but is to be regarded rather as a supplement to, than as a substitute for, the systematic works. It is a kind of abstract of the British Pharmacopœia, the drugs and their preparations being arranged in a manner supposed to facilitate their study. It contains a certain amount of information which students often consider it necessary to acquire, before presenting themselves for examination, but the utility of which is by no means apparent.

Whooping-cough; its Pathology and Treatment. By THOMAS M. DOLAN. London: Baillière, Tindall, and Cox. 1882.—Of this monograph, which obtained the Fothergillian Gold Medal of the Medical Society of London, we have little to say. It appears to be a painstaking compilation, but it can hardly be claimed for it that it much advances our knowledge of the pathology of pertussis. The author argues strongly in favour of its being classed with zymotics, and his remarks upon treatment are judicious and sound.

Micro-Photography. By A. COWLEY MALLEY, B.A., M.B. London: H. K. Lewis. 1883.—The more the art of photography is perfected the greater will be the expectation of its rendering much service to microscopists. There are many histologists who would prefer to see their preparations reproduced by this unerring method than incur the labour of drawing them, were it not that the details of the photograph are so often blurred and indistinct. The little handbook before us should do something to popularise the application of photography to microscopy, for the instructions given are clear and definite.

Pharmacopœia of the North-Eastern Hospital for Children. As every hospital appears to have its own pharmacopœia, it is probably not worth while to discuss the propriety of the custom. The present little pocket-sized production is interleaved with writing-paper, and contains the usual number of baths, mixtures, lotions, solutions, and gargles which have presumably been found most useful and efficacious at the hospital in question. The diets are also included; and a short account of the way to bring up babies is to be found at the end of the little book. In connexion with these brief and plain directions, we would remark that it would be well to reject the use of feeding-bottles with long tubes, and adhere to the old-fashioned flat fusiform one with a simple teat, which may advantageously be kept in a separate disinfecting solution when not in use. The long tube is a mistake altogether.

Archives de Physiologie. (BROWN-SÉQUARD, CHARCOT, VULPIAN.) No. VI. 1883. This part contains—1. Recherches expérimentales et critiques sur les Convulsions épileptiformes d'origine corticale, par MM. François-Franck et A. Pitrès. 2. Etudes expérimentales sur l'action physiologique de l'Iodoforme, par M. Gaetano Rummo. 3. Etude anatomique et clinique sur la Paralysie Labio-glosso-laryngée, par M. J. Déjérine. 4. Contributions à l'étude des Inflammations liées à la présence des Microbes; Peripneumonie contagieuse; Pneumonie rubéolique; Erythème cutané du rouget des Porcs, par MM. Cornil et Babes. 5. De la crise hématique dans la Fièvre intermittente, par M. Hayem.

CHILDREN'S HOSPITAL, SUNDERLAND.—A very important meeting of working men has been held at one of the large shipbuilding yards to bring more fully before them the claims for their support of the Children's Hospital. This institution has been doing a good work for nearly twenty years, and yet it has barely received any support from the classes it so largely benefits. Another point deserving of notice is that while in other large towns the subscriptions of the Hospital Sunday Fund were divided among the various charitable medical institutions in Sunderland, the general infirmary had a monopoly of the whole subscriptions. The unfairness of this was dwelt upon at the meeting, and also the great need of extending the operations of the Children's Hospital in Sunderland, in which town, as had been shown by the medical officer of the borough, the infantile mortality was very high, especially during the year 1882.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 22, 1883.

IT may be assumed that the Secretary of State for Home Affairs will deem it his duty to order an inquiry into the mental condition of the convict GOULDSTONE. He can scarcely refuse to do this in the face of an express statement by Dr. SAVAGE, the Physician-Superintendent at Bethlem Hospital, to the effect that his evidence was not properly taken, and that his opinion on the case has been misconstrued. It is not our business to anticipate the conclusion at which the Secretary of State may finally arrive. We have no means of determining whether or not the convict is or was insane. Meanwhile it *is* within our province, and it is our duty, to form and express an opinion as to the way in which medical evidence has been treated in the course of this trial, and the unsatisfactory position in which the question at issue is consequently left.

When Dr. SAVAGE was asked what conclusion he arrived at upon the whole case, taking into consideration the evidence of insanity existing in the family of the prisoner, Mr. Justice DAY interposed with the remark that "it seemed to him that that was the question the jury had to decide. A doctor was entitled to give his medical evidence, but not to draw a conclusion, which the jury had to draw." Now, if this means anything, it is that whereas the State appoints a lawyer to interpret the principles of law to a jury, it will not permit a physician to interpret the principles of medicine. Obviously no lawyer, however eminent, can be held competent to construe the medical facts in a case. It is his province to construe the *legal* facts, and to show when and how they apply to the case before the Court, because he is a lawyer; but he cannot construe the *medical* facts, because he is not a medical man. It would be as absurd for the man of law to attempt to do this as it would be for the physician to try to play the lawyer. This seems so plain that it would be waste of words and space to argue the question. Let us pass on to the consideration of what is more immediately important. While Dr. SAVAGE complains that he has been misunderstood, the foreman of the jury writes to the *Daily Telegraph* to say: "We did not misunderstand Dr. SAVAGE, who said he would not certify him (the prisoner) as insane, though he had examined him; but he 'considered he was of weak mind, owing to his slowness of appreciation of questions concerning the crime of which he is accused.'" Whatever may have been the impression Dr. SAVAGE desired to produce on the minds of the jurymen, that actually produced was that he did not, of his professional knowledge and power as an expert, recognise in the prisoner—as a patient—evidences of insanity. Of course if Dr. SAVAGE had perceived such evidences he would have had no hesitation in certifying. The point that struck the judge, and led him to interpose, and which seems to have produced an undesired effect on the collective mind of the jury, was that the opinion Dr. SAVAGE was inclined to form and express on the case as a whole after hearing the evidence, differed from that which he had formed and expressed on the basis of a personal examination. It would naturally occur to judge and jury that when a physician examines a patient personally he does it in the light of all such information as he can obtain of the clinical history of the case, and, of course, of any hereditary taint which may exist in his family. It is the professional duty of an examiner to take all these collateral facts into his consideration, *when* and *while* he is examining the case before him. Without taking them into account, he cannot see the objective facts before him in their right light. It is true that in the usual form of certificate the grounds on which the opinion arrived at is based are divided into two groups—the facts observed by the examiner himself, and those communicated to him by other persons; but in the case of a patient who is sufficiently rational to answer questions, as GOULDSTONE seems to have been, the examiner naturally and properly addresses inquiries to him in the course of the examination which are intended to elicit statements as to the mental health of his relatives. It would be an omission not to do this; and it was therefore only natural for judge and jury to assume that Dr. SAVAGE had made himself acquainted with all the clinical facts in the case of GOULDSTONE, and on the basis of their totality, hearing and seeing what he heard and saw at his interview with the prisoner in the light of the available clinical history as a whole, Dr. SAVAGE had arrived at the conclusion that he could not certify. Dr. SAVAGE now complains, "Counsel was not allowed to ask what my opinion was of the sanity of a man who had behaved as the prisoner had, and so my evidence was reduced to a very bald statement, that at the time I saw the man he was not a marked case of insanity. I do not know how one is ever to get the legal mind to see that every insane person is not a raging lunatic." If Dr. SAVAGE had simply given in evidence the conclusion at which he arrived on the basis of his personal investigation of the case in the light of all the facts he was able to glean of its strictly *clinical* history, the issue might have been different—in any event, the judge could not have legally interposed.

Let us look at this matter in a slightly different way, in order to test the accuracy of the view we propound. Supposing, for one moment, Dr. SAVAGE had been called in to see a patient not accused of crime, but simply suspected of insanity, he would ask, What has this person done to raise that suspicion? and having heard of something outrageous or eccentric in his conduct, he would have questioned him in relation to that matter; first, with a view to ascertain if there was anything morbid in the condition of mind which led to the act; then whether that condition of mind—assuming it to be abnormal—had existed at any previous point in the history of the case; and further, as a necessary part of the clinical history, if there was any hereditary taint. We cannot for one moment doubt that this was what Dr. SAVAGE actually did. That gentleman is so able, scientific, and practised an examiner that it is not only fair, but obligatory, to assume that, if he could not discover evidence of insanity in the case as a whole—that is, in the case as viewed from the clinical standpoint—no one else is likely to succeed. We gather from Dr. SAVAGE'S communication to THE LANCET, which appears in

another column, that he has no doubt in his mind that GOULDSTONE is or was insane. If that be so, we agree with him that "if this man is hanged, it will be a scandal to law, or rather to justice." On the one side we have a jury which did not receive the impression the medical witness desired to produce; on the other, this physician protesting he was misunderstood, and that he regarded the case as a clear one. The interposition of the judge was obviously made under a misconception which took the form of assuming that Dr. SAVAGE was going to wander beyond the strictly *clinical* evidence in the expression of his opinion, whereas the fact was that Dr. SAVAGE was about to explain that he did not mean to say he was not prepared to certify WILLIAM GOULDSTONE insane as the result of a clinical examination of that patient, but that if he had done what no physician ever does—that is, ignore all but the strictly objective in his examination,—he might have hesitated to certify. This being the real state of the case, it is impossible that the Secretary of State should leave the law to take its course without a further examination. It cannot be permitted, because it would be outrageous—and in a social sense intolerable—that a convict who may be a lunatic should be hanged as the result of a trial which, so far as the medical evidence is concerned, must be characterised as a tragedy of errors.

IT would be difficult to over-estimate the importance of the subject chosen by Professor ATTFIELD as the theme of the able Presidential Address delivered at Southport on Tuesday to the members of the British Pharmaceutical Conference. The question of the relations of the State to pharmacy and of the supply of drugs to the public is of vital importance not only to the pharmacist, but to the physician. That matters in the pharmaceutical world are fast approaching a crisis is only too obvious; so little protection is now afforded to chemists and druggists that their very existence is endangered. The Act of 1868 decrees that no person shall practise pharmacy without passing a State examination and having his name enrolled on the Register. The provisions of this Act are unfortunately little better than a dead letter, and for years past they have been systematically evaded. The custom which long existed in country districts of allowing the general shopkeeper to sell a few of the commoner drugs has gradually extended and developed, until now medicinal compounds of all kinds are openly retailed by grocers, hairdressers, chandlers, confectioners, drapers, and a host of other unqualified individuals. Indeed, in many cases completely furnished shops, undistinguishable in appearance from those of registered chemists and druggists, are opened by mere distributors of drugs who have no knowledge of the nature of the dangerous articles they sell, and who have no sense of the responsibility of their position. These sham chemists and druggists keep everything the properly qualified chemist and druggist is allowed to sell, excepting only a few of the more virulent poisons scheduled in the Pharmacy Act. The result is that the public are supplied with untrustworthy medicines, and medical men have no guarantee that their prescriptions are accurately dispensed, or that pure drugs are employed for the purpose. It must be remembered that whereas purchasers of food are more or less protected from the purchase of bad food by their personal power of judging of its quality, purchasers of drugs cannot be protected from the purchase of bad drugs by any personal power of judging of their quality. Even the aid which purchasers of food can invoke from officials under the Acts relating to adulteration cannot be obtained in the case of medicines, for Nature yields drugs which vary much in quality, and analysts are not as a rule sufficiently familiar with the varying standards of the many medicinal articles comprehended under the term "materia medica" to act in the interests of the public.

The remedy for this unsatisfactory state of affairs may, according to Professor ATTFIELD, be summed up in one word—"protection." Where the health of the public is at stake, and where the public cannot protect themselves, an exception to the rule of free trade is not only justifiable, but is imperatively demanded. The law already refuses to permit the unrestricted sale of certain drugs. The only question is where the limit of exception should be fixed. It is contended that the lines should encircle all poisons, and that they should one and all be excluded from the area of free trade. This involves no new principle; all that is necessary is an extension of the spirit and letter of the Pharmacy Act. At present only about a score of substances are deemed poisonous; but if the list were considerably extended it would afford protection to the public, and would restore to the pharmacist those functions and duties which he is best fitted to perform.

Professor ATTFIELD, in his Address, also called special attention to certain public inconveniences which will assuredly arise from an extension of the now too prevalent custom of purchasing drugs and medicines from stores and wholesale dealers. "Does it never occur," he asks, "to the man who purchases cheap physic at a co-operative store, at a general dealer's, or some other shop, to wonder what disadvantages would result if everybody adopted that course? A very little reflection would suffice to picture a few. In the middle of the night, at a time of sudden and serious illness of one whose life is precious, he will require a certain trustworthy medicine. To possess it he would give ten times the total of the small sums he saved by abandoning his reliable druggist; for excruciating pain, or perhaps something worse, has to be combated without delay. He does not know at which grocer's or general storekeeper's he could procure the drug, and he questions whether such a vendor would leave his bed to inquire who is knocking at the door, even if the summons were heard at all; moreover, he is not certain he could trust the medicine obtained there. Then may come on, all too late, regret at the short-sightedness of the policy which ignored the professional skill and ever-ready service of the qualified druggist in favour of the cheap, but ignorant and unsympathising general dealer." In equally graphic terms attention is called to another ever-present danger to which already many a valuable life has been sacrificed. A mother is tempted to purchase paregoric elsewhere than of a druggist, not knowing that, unless the sale is an illegal one, the article is free from that opium to which, when present in proper proportion, much of the efficacy of the medicine is due. The compound being weak, she unconsciously acquires the habit of giving large doses to her children. Some day there happens to be in the house by accident paregoric of proper official strength, purchased of a chemist and druggist. The usual large dose is ad-

ministered, and then, perhaps, all efforts to rouse her child from its deep sleep are unavailing. It is obvious that the supply of drugs uncontrolled by the State is seriously prejudicial to the interests of the public. Eliminate special technical knowledge from pharmacy, and let drugs be sold by any or every shopkeeper, and the public will have no guarantee that they are not supplied with drugs fair in appearance to the untrained eye, but in reality worthless; drugs which once perhaps were of good quality, but which, without altering in appearance, have become spoilt by age; medicines weaker than they should be, medicines stronger than they should be; poisonous fluids for external application not properly distinguished from those for internal administration; indeed, the public will have no guarantee that they are not supplied with the wrong medicine altogether.

THERE are two questions of personal liberty which cannot be too thoroughly kept apart or too thoroughly discussed. The first is the right of a person to have a preventable dangerous and infectious disease; the second is the right of a person having such a communicable disease to impart it to others. It is a strange claim which some men make for themselves and others—the right to have a disease which, by their own care or by that of society, they can avoid having. The right to live is an intelligible claim; so is the right to move about in the fresh air; and so is the right of the mind to move at large—in other words, the right to think. But the claim to the right to have small-pox has, to say the least, an unpleasant and questionable sound, and argues a curious mental constitution of the claimant, having this peculiarity above all others—impenetrability to argument, crotchetiness, or whatever other more euphemistic name can be given to it. There is probably only one argument that would find its way through the cranium of the man who vaunts his right to have the small-pox, and that is the experience of the disease and its loathsome consequences—disfigurement, boils, carbuncles, ulcers, eruptions, and what not,—compared with which the much-abused sequelæ of vaccination are a mere fleabite. There would be less blatancy and boasting among our anti-vaccination friends but that by the good sense of their parents in seeing to their vaccination they have no experience of the terrible disease and its consequences, which the commonest knowledge of history would tell them blighted the family life of previous centuries. Our pity would be extended even to them if, for want of their parents' sense in continuing and completing their vaccination, they should be overtaken with the disease; but it would be mingled with this consolation—that they were being taught a great lesson which could be taught them in no other way.

It is another matter, however, when men claim the liberty to communicate to others such a disease. Few would dare to make such a claim in its most naked and direct form. The claim comes out when a little trouble or sacrifice is asked to prevent such communication. We have heard of a young lady, convalescent from scarlet fever, reading books from a circulating library. She practically thought she had the right to communicate scarlet fever to others who had the books after her. The "disproportioned sin" of her mind was in her conception of the relative importance of her pleasure and of other people's rights. Other people had a right by the most severe laws to be protected from such a risk. But by the far more exacting law of her own selfishness she had the right to be pleased. She was a law—a very bad law—to herself. There are few people so bad as that—so given up to the law of self, which we are now asked to admire in the form of personal liberty. But there are many people still who think that they may hide and breed infectious disease in a house where clothes are made, or bread is sold; who think that if they have not the direct right to communicate disease they have the right to trade while infected—that is, to convey not only garments and food, but infectious germs in these articles. They think it is so right that they should be free to trade that if necessary it must cover their right to trade in disease and death. They are of opinion that a garment given in Birmingham, infected with small-pox, may be properly accepted and conveyed to Leicester, having the power not only to kill the recipient, but to start the plague in Leicester. We will yield to no one in love of freedom and of personal liberty, within fair bounds. But when hidden germs of disease are in question as likely to be deadly as dynamite or infernal machines, and which kill millions where these kill one, we think considerations of freedom are out of place. "Thou shalt not kill" is a rough and curt, but still a very much-needed limitation of personal liberty, and we are glad to see everywhere a recognition of the truth that personal liberty does not include the right to disseminate disease.

The last public recognition of this doctrine is in the Trades Union Congress assembled at Nottingham, where, we are glad to say, much good sense seems to have prevailed in the discussion of questions delicately and deeply affecting the members. Persons who bring the doctrine of personal liberty into discredit by abusing it are apt to quote the case of the poor being required to submit to isolation rather than infect the other members of their own family and others. A larger view of the question has found expression, one in favour of isolation, at the Congress. The following is the resolution agreed to:—"That having regard to the failure of the Public Health Act, 1875, to stop the origin and spread of disease, this Congress is of opinion that it is desirable to so amend the Act as to render it incumbent on local authorities to isolate persons in whose houses infectious diseases exist; that compensation should be granted for any loss arising thereby; and that the Parliamentary Committee be instructed to use its influence in securing the passing of such a Compensation Act." The Congress virtually asserts that the right of others to be protected is greater than the right of one to infect on all sides. It is a triumph of common sense which does credit to the working classes, and raises them above the cliques that would use them to advance their own crotchets. It is true that the Congress was of opinion that compensation should be made to those compulsorily isolated, and we think so too. The compensation need not and should not be large. To isolate sickness in a working man's family or that of a small tradesman is as great an advantage to the workman or the small tradesman as to the public. But still, in so far as he suffers positive and real loss for an isolation compelled in the interest of the State, so far, we agree, he is entitled to compensation by the State in whose interest primarily the isolation is enforced. And we heartily support this view of the case.

The resolution is a striking proof of the progress of the principle of compulsory notification.

THE peripheral branches of the sensory nervous system seem to have acquired a great importance in neural pathology during the last year. At least the general recognition and establishment of their consequence appears to be of this recent date. Although in part anticipated by WESTPHAL, yet the chief merit of this progress undoubtedly belongs to PIERRET. On the basis of a "wide sensory neurosis" this observer has coördinated the phenomena which have been found associated with locomotor ataxy. DÉJÉRINE has also contributed to our knowledge of the subject. And the significance of these advances has been well brought out by GOWERS in his able address on the eye symptoms in spinal disease. (Vide THE LANCET, vol. i., p. 1031, 1883.) Now PITRES and VAILLARD are adding fresh observations in this direction by a series of excellent papers which have appeared in the *Archives de Neurologie*.

These records tend to show that atraumatic peripheral neuritis is an affection of relatively common occurrence, since in a small space of time the above-mentioned observers have been able to collect nine cases. The disease seems not to be recognisable by the naked eye; patient search with the microscope is necessary. The alterations discovered are of a parenchymatous nature, being found exclusively, at least in their commencement, in the neural tubes themselves. The connective tissue remains normal for some time, and is only thickened when the neuritis has already destroyed or profoundly damaged the nerve tubules.

There are many analogies between the neural changes and Wallerian degenerations; but the two processes are not quite identical. Whilst the latter transformation proceeds in a regular manner, the different phases occurring at known intervals, as determined by experiment, the inflammatory alterations are, on the contrary, of a variable sort. The latter, indeed, may lead to complete destruction of the nerves in a few hours or days, or the process may require a much longer time. Again, whilst the Wallerian degenerations always tend to spread in a centrifugal manner, the neuritis may arise in a peripheral branch of the nerve, spread to neighbouring branches, and its intensity diminishing may not reach the trunk of the nerve, appearing thus to have an ascending centripetal march. Even in the cases where the neuritis appeared to be associated with primary changes in the central nervous system, no continuity of disease between the two could be detected. The nerve-trunks between them were healthy in every respect. All the peripheral inflammations of nerves do not give rise to trophic troubles, or appreciable sensory damage. These disturbances probably only appear when the number of fibres damaged is considerable. The derangements vary in character, according to the function of the nerves affected, and according to the degree of alteration. The peripheral neuritis has been found in association with rapid sloughing of the tissues about the sacrum, with unhealthy ulcers of spreading character, with herpetic eruptions, bullæ, perforating ulcer of the foot, chronic œdema, arthropathies and dystrophy of nails. Most frequently trophic troubles are accompanied by local anæsthesia of the integuments, or of the base of the ulcers, but these are not constant. The skin over a diseased joint in one of the cases exhibited no perversion of sensation.

COLONEL BOLTON'S Report on the Water supplied to London in July last is somewhat fuller than usual. Especial interest attaches to it on account of the recent outburst of complaint in regard to the London water-supply which has appeared in the daily press, stimulated in part no doubt by the not ill-grounded fear of cholera.

In July about 50 per cent. of the whole metropolitan water-supply was derived from the Thames above Teddington and from springs in the Thames valley. The Lea and springs in the Lea valley supplied 38 per cent., and the remaining 12 per cent. was obtained from eighteen wells in the north and south of London. The whole of the river water is filtered in accordance with the Act of Parliament, and Colonel BOLTON reports that all the London Companies keep within the limit of effectual filtration, which he places at 540 gallons per square yard in twenty-four hours, equal to 2½ gallons per square foot per hour. During the month in question none of the water supplied to London exhibited any turbidity. Colonel BOLTON makes no complaint of the quality or quantity of the water; but he urges, as so many have done before, the importance of securing a constant supply, and the danger of the present system of house storage. We have so often dwelt on this danger that we scarcely need to repeat our remarks. The house cistern, seldom cleaned, with an overflow-pipe leading straight into the sewer, and frequently over a badly constructed water-closet, is a fertile source of disease in English houses; and we are inclined to think, with Colonel BOLTON, that the first thing to be done is to force the Companies and the public to abolish the system altogether, and adopt constant supply for all houses and in all districts. This would be a great deal, but it would not be enough. London ought to have a perfectly pure and safe water-supply and as long as it is supplied by rivers like the Thames and Lea the metropolis cannot hope to attain it. The Water Companies, stimulated by compulsion and by wholesome fear, have in the last few years effected great improvements in their sources and works. They constantly increase the area of their subsidence-reservoirs and filter-beds, and do what they can to minimise the pollution of the rivers from which they draw. But, whatever they do, they can never secure real purity in these rivers. Land drainage, with its indefinite and constantly varying store of excretal pollution, must go into the rivers. Dead dogs must continue to abound in them; and every dirty alley, pigsty, and stable-yard must, in a storm of rain, help with its washings the pollution of the stream. Even this is not all. Human excreta are certain to get into the river to some extent, whatever sewage system is adopted. With these excreta come the inevitable and well-known risks. Little as we know of the cholera and typhoid poisons, we do know for certain that they are carried in the excreta, and are capable of rendering water, for some undefined period of time, actively dangerous to human beings. At the present moment there is no evidence to show that we Londoners suffer in health from the excreta-polluted water that we drink. But that we run a risk is certain. Thousands of deaths have been known to follow from the apparently slight choleraic poisoning of a

water-supply, and it is surely rash to assume that some similar calamity may not occur again in the future. We are repeatedly told that we are sufficiently protected from these risks by the natural self-purification of the water and by filtration. As to the first of these safeguards, we can only say that no one knows for certain what time or how much oxygen is required for the destruction of zymotic poison. As to the second, all that is really known is that no artificial filtration, however perfect, is able to remove such poison from water. The cholera poison passes through the finest Swedish filter-paper, and the typhoid poison has been known to pass from one village to another through a bed of solid earth. If we add to this the risk of careless filtration, or no filtration at all, at some critical moment—a risk justified by the fatal experience of East London in 1866,—we are surely entitled to assert that the water of the Thames and Lea should no longer be used as the drinking-supply of the metropolis.

Annotations.

"Ne quid nimis."

OFFICIAL CHOLERA REPORT.

A FURTHER report has been addressed to the Foreign Office by Surgeon-General Hunter on the question of the cholera epidemic in Egypt. The views embodied in it fully bear out the opinions we expressed in our last issue as to what would probably be the points to which importance will be given in the ultimate report. Dr. Hunter gives good grounds for the statement he has made as to the utter inadequacy of the method of death registration in force; he gives information as to the deplorable state of some of the hospitals; and he then proceeds to give some preliminary information as to the history of cholera in Egypt since 1831. He specially indicates that the four epidemics which have succeeded the first one in 1831 may have been connected with each other by means of a "diarrhœa," which is very common in the intervals, and which has caused much mortality; and both in his report and by means of appendices, which have been prepared by medical practitioners on the spot, he evidently inclines to the view that the recent epidemic has been but a recrudescence of the 1865 outbreak, the series of attacks having been kept up by means of isolated cases, which have been variously called cholerine, &c.; but which were, in point of fact, cases of a disease that required only the special conditions which prevailed early this year in order to develop true epidemic or Asiatic cholera. This view will doubtless be more fully supported in the ultimate report to be presented to the Government; and the arguments which might be raised against it in a country where, year by year, fatal cases of so-called English cholera take place without the occurrence of epidemic cholera, apart from importation, are also sure to receive consideration. Until this report is received we reserve any comment on the subject.

NEW BIOLOGICAL STATION.

As an outcome of the Fisheries Exhibition held at Edinburgh last year, and further supported by the extraordinary success of the International Fisheries Exhibition now being held in London, a scheme has, says *Engineering*, been fully matured by members of the Meteorological Society of Scotland and of the Royal Society of Edinburgh for establishing a biological station at Granton, on the Firth of Forth, which is to be called the "Edinburgh Marine Station for Scientific Research." In addition to the biological investigations which will be carried out at the Granton station, and which will be very extensive and varied and of the greatest scientific and practical value, there will be instituted a very complete series of observations on the temperatures of the surface water and of the bottom and intermediate waters at fixed points of the Firth, and at stated intervals throughout the year. It is intended also that a note shall be entered upon the Admiralty charts of the nature of the bottom and of the deposits throughout the whole region; and a record of the animals living upon them is also to be attempted, so as to arrive at a complete scientific description of the bottom and its deposits. The station is to be complete in many details, on which it is unnecessary to enlarge. Among other things, it is to be furnished with a steam launch, fitted for dredging purposes and the making of hydrographic observations. According to the design already fixed upon, the launch is to be built upon the plan of the steam pinnace that accompanied the *Challenger* during her cruise a few years ago, and will be provided with a separate engine for hauling in the dredges. A large amount of money will be required for carrying out this important scheme, but the committee entrusted with its organisation are quite confident of success attending their efforts in that respect. Mr. Murray, of the *Challenger* Commission, and the present able editor of the Reports of the *Challenger* Expedition, is the leading spirit of this most interesting project, which, we may hope, will rival that of Dr. Dohrn at Naples.

EFFECT OF METALLIC POISONS ON THE SPINAL CORD.

THE affections of the nervous system produced by contamination with certain metals, as lead and mercury, have been studied more extensively clinically than pathologically, and even yet it may be held to be undetermined whether the action of the poison is upon the peripheral or the central apparatus. Dr. Popow has recently put on record the results of an anatomical investigation upon animals (chiefly dogs) poisoned by arsenic, lead, and mercury respectively (Virchow's *Archiv*, 93, Heft 2), and in most cases he was careful to administer the poisons in varying quantities, so as to contrast the effects of acute and chronic poisoning. The general result of his inquiry goes to show that marked changes of an inflammatory character occur in the spinal cord, both in the grey and white matter, under all these conditions. In acute arsenical poisoning the spinal cord was softened, the grey matter especially being reddened and swollen; there was proliferation of the nuclei of the blood-vessels, and an exudation of a peculiar hyaloid substance. The nerve-cells were swollen, their processes dwindled, and their protoplasm granular or vacuolated, whilst in the white columns the axis cylinders showed irregular thickenings. In chronic poisoning it was difficult to discriminate between the two portions of the cord, the divided surface having a yellowish-red colour throughout; the walls of the vessels were thickened, and hyaline masses abounded; the nerve-cells vacuolated, or shrunken and pigmented; whilst free pigment masses, representing traces of hæmorrhage, occurred throughout the sections. In other words, there is, in poisoning by arsenic, a central myelitis at first, and later a diffuse myelitis. Very similar changes were found in the spinal cord after poisoning by lead—namely, exudation from bloodvessels; a general affection of the nerve-cells, beginning as cloudy swelling, and passing into atrophy and pigmentation; and inflammatory swelling of the axis cylinders. In mercurial poisoning, the early changes consist of hyperæmia of membranes and of the cord, followed by hæmorrhages, inflammatory exudation, and changes in the nerve-substance hardly differing from those seen in the other two cases. In each instance the peripheral nerves and the nerve-roots showed

no alteration; so that the conclusion is that the paralysis, spasms, &c., characteristic of the toxic effects of these metals, depend upon a central rather than a peripheral disturbance, all the degenerative changes described as occurring in nerves and muscles being strictly deuteropathic.

MR. GEORGE HIND, F.R.C.S.

WE regret to learn that Mr. George Hind, F.R.C.S., has been compelled to relinquish his professional engagements and retire from the occupation by which he has been known to many generations of medical students. Mr. Hind is now, after fifty years of incessant toil, incapacitated by sickness from giving those admirable demonstrations and clear explanations which have enabled hundreds of men to enter the portals of the profession and become successful and distinguished practitioners of medicine and surgery. Little need be said of his surpassing skill in teaching. Mr. Hind's name is so thoroughly familiar to students of all the London schools that enlargement on this head is superfluous. In Mr. Hind's long career the course of medical education has undergone great development. When he began to teach, the requirements of the examining boards were scanty compared with those now compulsory on medical students, and much which is now provided in the medical schools could then be obtained only from the private teacher. At the outset of his career Mr. Hind was associated with Sir Charles Bell in the Windmill-street School of Medicine, and very greatly assisted him in his lectures and researches. He worked with that great surgeon at the Middlesex Hospital; and when Sir Charles was appointed Professor of Surgery at University College, then just founded, Hind accompanied Sir C. Bell to the new institution, and began to form the anatomical and pathological museum of that college, being appointed its first curator, and laboured assiduously for several years in preparing with his own hands many hundreds of dissections, which even now testify to his extreme manipulative skill. His value was so highly appreciated, that on his being invited to take the office of Demonstrator of Anatomy in Jefferson College, Philadelphia, Lord Brougham, then President of University College, persuaded him to remain in London, with an advance of salary, as curator of the museum. Mr. Hind's skill in teaching and power of drawing soon drew to him a very large class of students. But the changes in the regulations in the College of Surgeons prevented his demonstrations from being recognised as parts of the required medical curriculum; and thus Mr. Hind became that by which his reputation and claim on our profession are grounded—the most skilful private teacher of anatomy and surgery in London. It is now mournful to learn that after passing a long life in arduous labour Mr. Hind, in the short evening of his life, is suffering not only from exhausting sickness, but from pecuniary need. Heavy calls upon him by relatives and others, which his generous temper could not deny, have left him in very straitened circumstances. We are sure that when it is known by his former pupils and friends that Mr. Hind is in sickness and want, funds will flow in rapidly and sufficiently to provide him with the necessaries and comforts to which his long life of toil so well entitle him. Subscriptions may be paid to the Hind Testimonial Fund at Messrs. Coutts and Co., 57, Strand, or to our office. It is suggested that a committee of his former pupils be formed to carry out the above object, and we shall be happy to receive the names of any gentlemen willing to serve thereon. The following gentlemen have already contributed:—Richard Quain, M.D., £10; Sir Erasmus Wilson, £10; C. J. Hare, M.D., £10; Alfred B. Barton, M.D., £5; Berkeley Hill, F.R.C.S., £3 3s.; Christopher Heath, F.R.C.S., £3 3s.; Domett Stone, M.D., £2 2s.; Thomas Wakley, F.R.C.S., £5; J. G. Wakley, M.D., £5; Thomas Wakley, jun., L.R.C.P.L., £2.

FAT IN THE STOOLS IN PANCREATIC DISEASE.

IN the *Deutsche Medizinische Wochenschrift* (September 12th) Dr. Ziehl records a case of cancer of the pancreas occurring in Professor Erb's clinic at Heidelberg, and discusses the question of fatty stools in pancreatic disease. The case itself presented no unusual features, but the predominance of gastric symptoms suggested the stomach as the seat of the disease, which was marked by the appearance of a painful tumour in the left side of the epigastrium, and by jaundice. The motions were of a peculiar silvery grey colour, and found microscopically to consist in great part of masses of acicular crystals soluble in ether; chemical analysis showing the stools to be composed of fat to the extent of half the solids. On dissection there was found a large scirrhous cancer of the pancreas, which had invaded the walls of the stomach and duodenum, and occluded the common bile-duct. The pancreatic duct was dilated and distended except at its termination, which was lost in the cancerous mass. The writer, after saying that the case illustrates the well-known fact of pancreatic disease being marked by the occurrence of fat in the stools, shows that the form in which the fat occurred in this case was exceptional, almost requiring the microscope for its detection, whereas it usually occurs in amorphous masses recognisable at once, and not in crystalline form. He further shows, by reference to cases recorded by Friedrich, Nothnagel, and Gerhardt, that when fatty crystals in excess are present there is not only pancreatic disease, but also occlusion of the bile-duct, the last-named author finding crystals resembling tyrosin and leucin in a case of catarrhal icterus. Some doubt may be expressed whether the crystals in question were tyrosin rather than fatty crystals; but Gerhardt's suggestion, that in such a case there was also temporary plugging of the pancreatic duct is probably true. Indeed, if the accepted view of catarrhal jaundice be a fact, there must surely be as much hindrance to the escape of the pancreatic juice as of the bile. If it were more frequently the custom to submit the alvine evacuations to as minute a scrutiny as is brought to bear on the urinary excretion, the occurrence of fatty matter in excess in the stools would doubtless be found in many more cases than those of primary disease of the pancreas.

DUSTYARD OR SEWER?

IN our issue of September 1st we published the report of THE LANCET Special Commission on the dustyards of London. We drew attention to the circumstances connected with the branch of industry in question likely to act prejudicially on the public health, and ventured to suggest a remedy for the evil. Since then evidence of a startling nature has been adduced that in one district subjected to our investigation there are far more serious flaws in the sanitary regulations and practice than can be referred to the storage and sorting of the contents of the London dustbins. Individual complaints of the foulness of the atmosphere at and around the basin of the Grand Junction Canal at Paddington were followed by a leading article in *The Times* of September 15th. This basin, which is skirted by wharves wherein many trades are plied, is a veritable cesspool of filth and corruption. If our information is correct, it would seem to show that there is no continuous outflow from the basin; that a vast amount of decomposable matter is allowed to accumulate therein; and that not until the sanitary inspector complains of a nuisance is anything done to avert the possible consequences of conditions which, if not the actual cause of specific diseases, are, to say the least, highly conducive to the development of zymotic affections and the various forms of wound-fever. From personal observation we can say that, quite independently of the occasional emptying, cleansing, and refilling of the canal basin, a very disagreeable odour emanates from

it. Nor is this surprising when it is borne in mind that a considerable quantity of organic matter must necessarily be washed from the wharves, to say nothing of the increment derived from the inhabited barges moored within what may be described as an open sewer. It is said that the offensive smell is much worse in the evening, and that it sometimes amounts to an insufferable stench. This can be readily understood, for during the greater heat of the day there is a more rapid movement and renewal of the surrounding atmosphere and so a greater dilution of the poisonous gases. The evening air is charged with moisture which serves as a vehicle for the effluvia from the basin. The perpetual nuisance is varied by changing physical conditions, the climax being reached when once a year or so the muddy water is let into the sewers, and the black residuum, "knee deep," is exposed and disturbed during its removal. The dustyards have much to answer for, but they sink into insignificance in comparison with such a hotbed of disease as the Grand Junction Canal basin. It is high time that something was done to deliver a densely populated neighbourhood and a large general hospital from the danger that threatens them. It is enough to stand on the verge of the canal basin by day to make one dream of impaired health at night, and to find it, perchance, a reality in the morning.

BROMIDE OF POTASSIUM IN DIABETES MELLITUS.

THE influence of the sceptre which the so-called "diabetic centre" has so long swayed over the domain of diabetic pathology is, perhaps, destined ere long to be felt less acutely, or even not at all. It is certain, at all events, that the majority of pathologists are by no means satisfied with the opinion that diabetes is essentially due to a lesion of the parts of the central nervous system about the medulla oblongata. In 1866 Begbie, probably influenced by the prevailing views of the nervous origin of diabetes, suggested the employment of bromide of potassium in that disease. He obtained satisfactory results in four cases. Since that time many physicians have employed the drug with varying success. Last year M. Felizet presented, in August, to the Académie de Médecine a work entitled "The Cure of Diabetes Mellitus and Glycosuria by Bromide of Potassium"; and now we have before us the report of the commission appointed to inquire into that paper. From a therapeutical point of view, the numerous theories of diabetes may be divided into three classes, according to the report. The alimentary, hepatic, and nervous theories are the names adopted. Each of these hypotheses has had its own therapeutics. M. Felizet believes that he can cure diabetes with bromide of potassium. His belief is based on the results of clinical and experimental researches. Glycosuria induced by puncturing the floor of the fourth ventricle of rabbits ceased sooner under the administration of bromide than when left alone.

CAN "VIEWING THE BODY" BE LEGALLY OMITTED?

WE are led to ask this question because at a recent inquest Mr. Payne is reported to have omitted the ceremony; and if in so acting this coroner was justified, it must be obvious that other coroners have needlessly, we might almost say wantonly, subjected juries to much annoyance and even danger. It would certainly appear that Mr. Payne has had the courage to disobey the law, or he would not express a wish to see the law altered. According to the ancient statute the "crowner" was to take certain neighbours with him and *view* the remains or treasure trove. Has this statute been repealed or become obsolete? If it be no longer in force, Dr. Diplock might have held an inquest on the remains of persons who lost their lives at the Southall Park fire, because there was no doubt that such remains existed, although no one could "view" them. We hope Mr. Payne is right in his interpretation of the law and that a coroner may at pleasure dispense with the formality of "viewing the body." Should this prove to be the fact, coroners ought henceforward to be more considerate of the time and feelings of juries than to insist on the performance of the farce of "viewing," for it is generally nothing more. In any event it is curious, and calls for the consideration of the Lord Chief Justice, who is the chief coroner, that the practice differs so widely in the metropolitan districts as between that of Mr. Payne and that of Dr. Diplock.

THE HISTOLOGY OF GONORRHŒA.

PROFESSOR HAMILTON of Aberdeen, whose profound study of the histological conditions in bronchitis well qualifies him for the task, has been enabled to examine microscopically the condition of the urethra in acute gonorrhœa, opportunities for which must rarely occur. The epithelium of the urethra is disposed much as in the bronchus, in three strata—the deepest of flat cells, the middle of pear-shaped cells, and the superficial of columnar cells. In acute gonorrhœa the process consists mainly in an exaggerated and irregular proliferation of the deeper strata of cells, the cell-production being so rapid that the discharge contains but few of the fully developed columnar forms. The denudation of the surface in this process explains the scalding pain on micturition. The secretion of the mucous glands is increased, as in bronchial inflammation. There is also considerable corpuscular infiltration of the mucous membrane, leucocytes being accumulated in the subepithelial lymphatic spaces; and although there does not exist an elastic basement membrane, which Professor Hamilton believes to prevent the escape of these interstitial products on to the free surface in bronchitis, he doubts either if that occurs here, believing rather that the cellular exudations in the meshes of the mucosa are carried away by the lymph stream. There was not in this specimen any marked congestion of the bloodvessels; and the trabecular tissue of the penis was not abnormal, unless accumulated leucocytes in the cavernous spaces be so considered. Strictures are produced in chronic urethritis probably by the submucous tissue becoming cirrhosed and contracting upon the lumen; the absence of "fixed joints" indicating the difference in result from chronic bronchitis when the tubes are dilated. The tubules of the testicles and of the epididymis from the same case also showed marked catarrhal inflammation, being filled with débris and epithelial cells in all stages of disintegration; but there was no interstitial inflammation whatever. The paper is contained in the current number of the *Practitioner*, which is also enriched by a very lucid account of the pathology of dropsy from the editor's pen.

ALLEGED DEATH FROM VACCINATION.

A SERIOUS charge was recently brought by Dr. Kavanagh, public vaccinator for Deptford, against Mr. Fisher, one of the district medical officers. Mr. Fisher, it appears, had given a certificate that certain children who had been vaccinated by Dr. Kavanagh were suffering from syphilis, and Dr. Kavanagh brought his conduct before the Board of Guardians. At the same time a letter was produced from Dr. Stevens, medical inspector of the Local Government Board, severely censuring Mr. Fisher for his conduct. In his defence, Mr. Fisher reiterated the statement that the children were suffering from syphilitic eczema, and finally the Guardians determined to ask the Local Government Board to hold an inquiry into the circumstances of the case. One of the children has since died from double pneumonia,

and at an inquest held upon the body on Sept. 18th, it was shown that neither vaccination nor syphilis had anything to do with the death of the child. Another of the children, vaccinated by Dr. Kavanagh at the same time, has also died, but as yet no inquest has been held.

A MAGISTRATE ON CERTAIN "PESTS OF SOCIETY."

THE notorious Du Barry, who professes to have great secrets in regard to the cure "of certain diseases," does not seem to have gained much by proceeding in the Southwark Police Court against his solicitor, Mr. Boardman, and Mr. A. de Gallas, his clerk, for having conspired to defraud him of £90, £50, and of smaller sums. Solicitors who respect themselves should have no dealings with gentlemen who "cure certain diseases"—either for £90 or £50. The magistrate dismissed the summons. But the very association is injurious. We allude to the report of the case in the *Daily Telegraph* of Sept. 15th, to direct attention to the important remarks of the magistrate on the prosecutor and his calling. The magistrate (Mr. Bridge) said "it was a matter of very great importance, because the prosecutor followed one of the most mischievous, degrading, and wicked pursuits possible, and it would be well if the medical profession were to take seriously into consideration the introduction of a measure into Parliament making every person who pretended to cure what were called the diseases of youth—unless he was a properly qualified medical man—liable to heavy punishment. The prosecutor in the present instance was one whose profession made him one of the greatest pests of society. The charge against the defendants was also of a grave character, because, if it was true that they combined to defeat the ends of justice, and to obtain money by false pretences from a man who was charged with a grave offence, being themselves his legal advisers, they would have done that which would disgrace the profession to which they belonged, and number them among those who were almost as great pests to society as the prosecutor." Nothing can be more accurate than the magistrate's description of these pests of society, or more right than his wish for an Act of Parliament, which would heavily punish them. Mr. Bridge will do a great service if he will bring this subject under the notice of Her Majesty's Government before the reintroduction of the Medical Bill. His worship will see that the matter is one rather for the public, and for those who are interested in the protection and purity of youth, than for the medical profession, who might be thought to be actuated by motives not altogether unselfish. The public scandal and evil of the whole class represented by Du Barry cannot be overstated.

ANALGESIA BY THE PROPOSED NEW METHOD.

ALTHOUGH some months have elapsed since our Paris correspondent gave an account (vide THE LANCET, vol. i. p. 1071, 1883) of a new method of inducing "anæsthesia" discovered by Brown-Séquard, yet, judging from the inquiries which have reached us, the intelligence seems not to have become familiar to the many. Brown-Séquard has found a very simple means by which he can produce a prolonged insensibility to pain without any deprivation of cerebral functions, without any damage to the sense of touch in any part of the skin or of the special senses, and without any alteration of the force, regularity, or appropriateness of the voluntary movements. He has also observed that wounds made while the animals (monkeys and others) are in this state of analgesia do not cause pain till they heal. These are really wonderful things. But up to the present the method has not been applied to man. If Brown-Séquard is only able to carry this out, we think everyone will admit that something of practical importance and utility has resulted, even in these days, from the practice of vivisection. The method consists in irritating the mucous membrane of the upper part of the larynx by carbonic acid or chloroform vapour. When both superior laryngeal nerves are divided the analgesia fails to make its appearance. For further particulars we may refer our readers to the letter above cited or to the Comptes Rendus de la Société de Biologie.

TRADES UNIONISTS ON THE PREVENTION OF DISEASE.

SOME years ago, in a report we published on the spread of disease through laundries, we pointed out the unfairness of interfering with the business of the poor without giving compensation. Our sanitary commissioner detected many cases where washing and mangling had been done in the same house, sometimes in the same room where patients lay suffering from infectious disease. In one room there were tablecloths and finger *serviettes* belonging to a West-end club stretched on strings to dry over the very bed where a man was being nursed by the laundress's family for small-pox. On all sides a disposition was shown to conceal the facts, and it will be easily understood that laundresses and other persons who take work home would dread losing their customers if it were known that fever was present in their houses. Yet in such cases it is absolutely necessary to stop all home work, to seize and disinfect all that may be found on the premises before it is returned to its owners, to isolate the patient, and finally to thoroughly purify the house before allowing the renewal of work. But all these indispensable precautions would in most cases inflict ruin on the poor women who take in washing, mangling, tailoring, dressmaking, &c. We therefore urged that as the interference with work and individual liberty would injure the individual for the benefit of the community, suitable compensation should be given from the public purse. Our remarks so far bore fruit that when subsequently the Chelsea sanitary authorities discovered a case of fever in the house of a laundress, they not only stopped her business, but gave her compensation. The principle we then propounded has, however, travelled farther afield. It has now become an article of the political programme advocated by more than half a million trades unionists who were represented at the Nottingham Congress, to which we have elsewhere referred.

COMPENSATION AND NOTIFICATION AT MAIDSTONE.

THE Maidstone Local Board of Health have had under their consideration, at the instigation of Dr. Plomley, the question of compensating those who may be removed to the new and commodious hospital for infectious cases. Dr. Plomley asked for a general resolution to compensate all persons compelled to remain away from work by order of the medical officer. The board considered this too sweeping, but agreed to resolve that in future all such cases shall be dealt with on their merits.

"TEA v. BEER."

WE understand that Mr. Edward Payson Weston has announced his intention of undertaking a pedestrian tour through England and Wales, with a view to demonstrate the superiority of tea over beer and alcoholic drinks in general during periods of prolonged muscular exertion. He proposes to walk fifty miles a day for 100 days, and at the close of each day's walk to deliver in the town to which his day's journey may have brought him an address on Temperance, having for its title "Tea *versus* Beer." He is anxious for medical men of the towns through which he may pass and in which he spends the night to visit him, for the

purpose of recording the state of his temperature, respiration, pulse, &c. It is proposed to commence the tour on Nov. 5th, and should this date be finally adopted the task, if successfully accomplished, will be completed on February 28th. As Sunday will be taken as a day of rest, the actual distance traversed each week will be 300 miles.

MORTUARY ACCOMMODATION AT KENSINGTON.

AT an inquest recently held on the body of a woman who died at Notting-hill, a juror, referring to the "shocking condition of the body from decomposition," contended that "there ought to be a proper place for such cases"; and the coroner is reported to have replied that the mortuary, which was recently erected, is of no use in that part of the parish in which the inquest was held. The body in question, however, lay within a mile of the building, and when a post-mortem examination is necessary, the coroner is empowered by the Sanitary Act of 1866 to order the removal of the body to the "place" provided for that purpose. Under these circumstances, therefore, the vestry can hardly be expected to provide a second one until the inefficiency of the present building is demonstrated more fully than it was in the recent inquiry. About 120 post-mortem examinations are held in the parish annually, and it would be an undeniable benefit to the inhabitants, and especially to those dwelling in tenement houses, if the coroner exercised the powers referred to above more frequently and ordered the removal to the already existing mortuary of every body on which such examination was to be held.

ENTERIC FEVER IN NORTH LONDON.

AS we predicted last week, the maximum number of deaths from the outbreak of enteric fever in North London had been already reached. During the week ending Saturday, September 15th, 31 deaths were registered from this disease in London, being 4 less than in the preceding week. The last return of the Registrar-General shows that when the hospital cases are distributed, 11 belong to St. Pancras and 4 to Islington. It is satisfactory to learn that the outbreak is practically over, and that although some deaths are still occurring, they are those of persons who received infection some weeks before. Probably no fewer than 400 persons have been attacked.

"A PAUPER KILLED BY OAKUM-PICKING."

UNDER some such heading as this the newspapers report a case in which the guardians of St. George's-in-the-East are alleged to have kept at work against the express recommendation of their medical officer a man who was sick. The coroner's jury officiating at the inquest returned a verdict which involves a censure. It is sad to think that boards of guardians jeopardise the lives of the poor by not carrying out the doctor's orders. The practice is, unhappily, a very old one, and altogether too common. The only effectual remedy is a little less red tape and more common-sense humanity at the Local Government Board.

DIPHTHERIA AT HAMBLEDON.

WE have information to the effect that diphtheria is seriously prevalent at Hambledon in the Droxford Union. It commenced two months ago, and has recurred at intervals until thirty-eight cases and ten deaths have taken place. The drainage of the district is represented to be very unsatisfactory, cesspools and wells are in dangerous proximity, the drinking water is deficient in quantity, and ponds are hence resorted to. The sanitary officers are stated to be working zealously with a view of preventing further extension of the disease.

FISH DIETARY.

DURING the past month a dietary of fish on one day in the week has, with the approval of the Faculty, been tried as an experiment at the Bristol Royal Infirmary. The results, so far, have been very gratifying, as apart from the saving in the cost of fish compared with butcher's meat, the agreeable change is greatly appreciated by the patients. The only deviation from the usual dietary being that patients on meat receive fish instead on one particular day.

AT the last meeting of the Bethnal Green Board of Guardians the school committee recommended that a rat-catcher be employed to destroy the rats in the school grounds at Leytonstone. It was stated that if they were not destroyed the property would fall to the ground, owing to the foundations being undermined. A child, aged three, who had been given a piece of biscuit, went to sleep with it in her hand. In the morning the hand was found terribly gnawed by rats, and, though the fear of mortification has passed away, it is considered probable that one of the fingers will have to be amputated. It is alleged that the rats are present owing to the keeping of a large number of pigs on the premises.

IN a communication to the Journal of the American Medical Association (August 4th), Dr. Vaughan and Mr. Dawson, Ph.C., show that arsenic injected into the mouth and rectum after death is liable to be diffused throughout the body, so that appreciable quantities can be extracted from the viscera, as much, indeed, as if the case were one of poisoning. They point out that the frequent use of arsenic as an embalming agent may thus embarrass the ends of justice in a suspected case of criminal poisoning. Indeed, their inquiry arose out of a case where the accused explained the presence of the arsenic in the viscera on the ground that he had injected it into the mouth and rectum for embalming.

ANOTHER death from apoplexy in a police cell has occurred, the prisoner, a woman, having been locked up at Kensington Police Station on a charge of drunkenness. When taken to the station a surgeon was called, and, as he considered her to be in danger, he ordered a pillow to be supplied and applied remedies, a watcher being also placed in the cell. Some time afterwards he was again called, and found her dead. At the inquest a verdict in accordance with the medical testimony was returned.

ON September 11th, *L'Union Médicale* contained an interesting account of an extraordinary case, in which a fœtus at full term had sojourned fifty-six years in the neighbourhood of the mother's womb without having undergone any change whatever and without having caused any distress to the mother, beyond that resulting from its size and weight. The mother died at the age of eighty-four, and the perfect infant was discovered in a cyst, whose wall was petrified, about the right Fallopian tube.

M. G. MEYERS, of Paris, is stated to have invented an incombustible paper, which in addition to its power of resistance to extreme heat has the merit of preserving its normal appearance under the action of fire. The utility of such a material is obvious. Amongst other purposes to which it may advantageously be applied is the construction of non-inflammable theatrical scenery, the combustible nature of which, as at present in use, has contributed so largely to disasters from fire in places of scenic entertainment.

WE regret to have to record the death, on the 16th inst., at Orkney, of Dr. Charles Stewart Clouston, of Gunnersbury.

MESSRS. CROOKES, ODLING, and TIDY state that of the 182 samples of water collected by them during the month of August from the mains of the seven London water companies taking their supply from the Thames and Lea, the whole, excepting three samples, one of which was recorded as "very slightly turbid," and two as "slightly turbid," were clear, bright, and well-filtered. In respect to aeration, and freedom from colour and excess of organic matter, the waters maintained the excellent character exhibited by them now for many months past.

A PRIZE, established in accordance with the wishes of the late Signor Bufalini, Minister of Public Instruction in Italy, of the value of 5000 francs and to be known as the Bufalini Prize, has been announced for international competition. The subject for 1883–4 is "The Application of the Experimental Methods to Science." The essays must be received by the Secretary of the Medical Faculty of Florence before October, 1884.

ACCORDING to the French political papers France is to possess another School of Medicine. This will be in the Orient at Beyrouth. The necessary structures have just been completed. The courses will begin in October next. The professors will be chosen from the doctors of the Faculty of Medicine, and will receive their appointments under the auspices of the French Government.

AT the meeting of the French Association for the Advancement of Science held at Rouen, M. Mallez presented an instrument of precision called a surgical pantograph, for measuring the dimensions of the enlarged prostate and for demonstrating by the aid of graphic tracings the influence of treatment on the diseased organ.

THE French wholesale druggist who was accused of fraudulently substituting sulphate of cinchonidine for sulphate of quinine, which he supplied to the hospitals of Paris last autumn, has been sentenced to a year's imprisonment, to pay a fine of fifty francs, and to defray the expense of an advertisement of the judgment in a dozen French journals.

THE Pasteur Scientific Mission has proceeded to Tanta to examine into the nature of the cattle disease which prevails there. We regret to see the announcement that the mission has been deprived of the services of Dr. Louis Thuillier, who has succumbed to an attack of cholera at the early age of twenty-seven.

WE are glad to note that the indubitable qualifications of Mr. E. L. Jacob for the post of medical officer of health for the Rural Sanitary District of the Guildford Union have been recognised by his appointment to that office until Dec. 31st, 1885.

CARDIFF INFIRMARY.—At a special meeting of the governors of this infirmary, held on the 17th inst., it was resolved to authorise the committee to let the freehold site of the old infirmary, and the buildings on it, to the Council of the University College for South Wales, on a yearly tenancy, at the rent of £400 a year, the University College Council paying all rates and taxes, and keeping the premises in proper repair. It was also resolved to raise, by way of loan, £6000, the balance required above the subscriptions promised to the new building, to meet the entire cost of erecting it, and to enable the trustees to finish it in accordance with the recommendation of the medical staff.

DR. WM. PATRICK CONNOLLY, of Bruff, who has been charged with conspiracy to murder, has been sent for trial, but has been admitted to bail.

THE INTERCOLONIAL MEDICAL CONGRESS AT AMSTERDAM.

QUARANTINE IN REGARD TO CHOLERA.

PROFESSOR DR. STOKVIS, the President, opened the Congress, on the 6th inst., with an eloquent and masterly address in which he paid a well-merited tribute to the memories of Bontius, Piso, Darwin and others, and passed in rapid review the advanced and advancing medical, physiological, and pathological doctrines of the present day. Many interesting papers were read and discussed. The subject of quarantine, introduced by Professor de Chaumont, attracted special attention. It was strongly advocated, as a protective measure, against cholera by the Spanish, Portuguese, and French delegates, and as emphatically opposed by the author of the paper, and by Drs. Lewis and Ewart, and Sir Joseph Fayrer. As the subject is engaging the attention of the continental powers a good deal at the present time, we give the speeches of the three last-named gentlemen.

Surgeon-Major T. R. LEWIS, Assistant Professor of Pathology, Army Medical School, Netley, spoke as follows:—It is now just fifteen years since the British and Indian Governments honoured Dr. Douglas Cunningham and myself by sending us to India for the purpose of inquiring into certain views regarding the causation of cholera, which were then widely entertained. The results of these investigations were published from time to time in the annual reports of the Sanitary Commissioner with the Government of India. Whilst listening to the remarks which have been made during this discussion, I have been struck with the unqualified character of some of the assertions regarding the contagious character of cholera. It has been assumed that it is readily communicable from one man to another, and that the arrival of a cholera-affected person in any district, or of a person who has recently been in contact with the disease, is sufficient to give rise to a widespread outbreak. I do not for a moment find fault with these speakers for entertaining such an opinion—they were but giving expression to a very generally accepted doctrine; but I beg leave to be permitted to record my dissent from any such view. My former colleague, Dr. Cunningham, and myself have had considerable experience in investigating localised outbreaks of the disease, but in no single instance have we been able to satisfy ourselves that it was spread from man to man. Until very recently all the most important data regarding cholera which were collected in British India passed through my hands; and I recollect that, every now and then, instances were recorded which, at first sight, seemed to support such a conclusion. The evidence in these instances was carefully sifted, and I have often endeavoured to find the missing links which were required to complete the chain, but always in vain. I am well aware that some of the instances which have been recorded in Europe are exceedingly puzzling. These instances are few and are known to you all; but even of these it can scarcely be said that they have stood the critical analysis of the renowned professor of hygiene at Munich, Prof. Max von Pettenkofer. Before accepting, therefore, even these, so to speak, classical illustrations, I would urge upon you to study von Pettenkofer's most able papers. As already remarked, instances of the supposed communicability of the disease have been referred to in this debate, but no notice has been taken of persons or places which have escaped. When a question has to be decided on evidence alone, both sides have to be considered. Time will not admit of my entering at any length into this phase of the subject; but I should like to be allowed to refer to one or two instances of exemption from attack under circumstances exceptionally favourable so far as contagium is concerned. There are in Calcutta two very large medical institutions—the College Hospital and the General Hospital,—and for many years it was the custom to treat the numerous cholera patients in each of these hospitals in the same building as the other patients. Sir Joseph Fayrer and Dr. Ewart, who are now present, will bear me out when I say that, during all the years in which they were officially connected with those institutions, no evil results could be referred to this custom. As regards the General Hospital, I may mention that it consists of three buildings, and that although until recently it was the custom to admit all cholera cases into the central block,

there was not the slightest suspicion that any evil resulted to the other patients in it. It so happened that all three blocks had for many years been remarkably exempt from outbreaks of cholera. A few years ago, however, several cases occurred in two out of the three buildings, but, strange to say, it was the central block which escaped. Again, as an instance of places which have escaped outbreaks of the disease, notwithstanding frequent and early intercourse with affected localities, the history of the convict settlement at the Andaman Islands, in the Bay of Bengal, may be cited. This settlement is about three or four days by steamer from Calcutta, a city from which cholera is never absent, and during the last twenty-five years the convicts for transportation have been collected in Calcutta from all parts of India, and at intervals of a few weeks taken on to the Andamans. Nearly all the food of the convicts is likewise taken from Calcutta, consequently there must have been very free intercourse between the two places; yet, notwithstanding all this, there has not been a single outbreak of cholera in the settlement. Had the Government adopted a strict system of quarantine during this long period, the instance might, with some show of reason, have been cited as an illustration of the efficacy of quarantine in the protection of a colony; but the history having been what I have narrated, I can hardly imagine that the most ardent advocate of the measure will find fault with the authorities for not having adopted it. Indeed, I can hardly imagine—seeing that for the last quarter of a century this great, so to speak, unplanned experiment has proved almost beyond dispute that, at least for all practical purposes, cholera may be looked upon as a non-transportable disease—I can hardly imagine that as regards the future they would advocate that these convicts—many of them in fetters—should be kept in a crowded ship outside the harbours in the fierce heat of a tropical sun, and this in order that they should undergo the "regulation" number of days before landing, because they have come from an affected place. As regards this question of quarantine and cholera, the experience which has been gained in India is strongly corroborative of the conclusion which Professor de Chaumont has arrived at, and which he has so ably defended in the important paper just read at this meeting. I warmly second his recommendation, that this Congress should not lend its support to the introduction of any restrictions which would so seriously interfere with personal liberty, and be liable to be so carried into effect as to inflict the greatest hardship, and even cruelty, on wholly innocent persons. It has frequently been declared that the British Government objects to quarantine solely on mercenary grounds. I venture to think, however, that I have shown that it has at least some other reasons for the attitude which it has assumed in this matter. The fact that cholera quarantine is not only discountenanced, but actually forbidden in British India, shows that the Government of that country has no faith in its usefulness, and no one will accuse it of being unmindful of the lives of its own people, whatever may be said of its avarice. The practice in India is not to establish quarantine cordons, but just the reverse. Immediately on the appearance of cholera the troops are dispersed and encamped on carefully selected sites away from the locality where the disease prevails, and, if necessary, these camps are shifted again and again until the disease disappears. This practice has been followed by the most marked success, and it has never been found that these camping grounds acted as foci for the dissemination of the disease. The history of the recent outbreak in Egypt coincides in a remarkable manner with what is ordinarily observed in India, though it was at first very generally and very dogmatically asserted that the disease had been brought by ships from that country. But what, so far as is known, was the history of this outbreak? Instead of breaking out at Suez, the place in Egypt most generally frequented by Europeans from India, or along the course of the Suez Canal, where our troops, both European and Native, had been congregated, it broke out at Damietta, a port at which neither the Peninsular and Oriental nor any other of the ordinary steamers from India ever call. If the disease had been carried into Egypt, why was it that it did not start at Suez, Ismailia, or Port Said, seeing that, as was demonstrated by after events, there was nothing in any of these places inimical to the occurrence of the disease among their inhabitants? Bearing all these great facts in mind, I would strongly urge on the members of this congress the absolute necessity of studying the question afresh, each one for himself, and not remaining content to accept any doctrine as regards the cause of cholera merely because it may be advocated by this authority or by that. I would not for a moment have you think that I undervalue the labours of the acknowledged leaders of thought in this matter, and I am quite sure that were the great sanitary authority of modern times, my revered teacher, the late Dr. Parkes, amongst us, he, notwithstanding his well-known extreme consideration for his co-workers and his predilection for the opinions which are at present the most popular, even he would be amongst the warmest advocates of renewed independent research and of further observation in this matter. I would not for a moment suggest that the search for a poison or germ of cholera should cease. On the contrary, I would have it carried to its utmost limit; but, so far as my own observations have gone, I feel bound, on an occasion like this, to state that I have not been able to collect any series of facts in support of the existence of a transportable cholera poison of any kind, nor have I been able to satisfy myself that anyone else has done so; consequently, it is in my opinion wholly illogical to frame stringent quarantine regulations for the purpose of keeping out an entity which as yet has not been proved to exist. What the essential cause of cholera may be does not fall within the scope of the present discussion. Were it so, I venture to predict that the sum and substance of the remarks of every speaker who had honestly studied the subject for himself would be: "I do not know."

Dr. JOSEPH EWART said that, a few months after his arrival in Bengal, in 1854, he was called upon to deal with an outbreak of cholera at Barrackpore, and later on, in the same year, at Dinapore. Relying on the teaching of the schools, and the standard works of the day, he was imbued with the view that it was highly contagious. He was, however, soon undeceived. The hospital attendants and the fellow-countrymen of the patients laboured under no such delusion. They nursed and waited upon the sick with perfect impunity. He next saw the disease at Ajmeer, Rajputana, in 1856. This outbreak was an offshoot of a widespread and virulent epidemic which affected most of the important towns of the North-Western provinces. Being still somewhat under the dominion of the precepts inculcated in the London schools, he recommended the adoption of quarantine. The advice was promptly acted upon; but it soon became apparent that the measure so intensified the scourge, that cases were admitted into hospital from all parts of the prison, with the exception of that set apart for female convicts. On the realisation of this state of affairs, no time was lost in having the prisoners removed to a series of well-ventilated temporary huts, situated two or three miles to windward of the gaol, on a ridge admitting of perfect drainage, and possessing every facility for the maintenance of all needful hygienic and sanitary precautions. The result was most satisfactory. No fresh cases occurred in camp, and as the deserted cells were cleansed and limewashed the epidemic did not extend to the female department. Here, again, there was no evidence to show that the disease was propagated by contagion or infection. Further experience of cholera was gained at the Medical College and General Hospitals at Calcutta between 1863 and 1876, where it was constantly to be observed in its mildest and severest forms. At these institutions, where a great number of students, a full professional staff of physicians and their assistants, nurses, and other attendants, were almost daily brought into direct association with cholera, it was never found to prevail among them disproportionately, or more frequently than among a corresponding group of the general population. A noteworthy fact was also observed—viz., that a similar immunity was enjoyed by the sweepers whose duty it was to remove the discharges, and by those persons who washed the bed linen and personal clothing of the patients. Such facts as these have convinced most experienced physicians practising in India that the malady is not infectious, contagious, or catching from person to person. Quarantine is therefore unnecessary, and may prove very disastrous to the individuals included within the cordon, as it did in the case of the Ajmeer gaol already cited. Those who advocate quarantine would do well to note the extreme difficulty experienced in completely isolating even a single person prostrated by disease. Indeed, when the matter is carefully weighed in all its bearings, or threshed out, it will be found to be all but, if not altogether, impossible. If this be so, how much more impracticable must it be to quarantine, with anything approaching perfection, ships belonging to

the navy or the mercantile marine, or a community on land? It has been stated that the practice of removing troops in India from an affected to an unaffected locality is only a modification of quarantine. But a little consideration will suffice to show that such a notion is quite erroneous. This method of dealing with cholera is simply the substitution of a non-epidemic for an epidemic area—of a healthy for an unhealthy locality—where the principles of hygienic and sanitary science can be promoted and developed to the utmost extent, with the happy result of almost invariably stopping the dissemination of the disease. What is done is to place the sick and as many of the unaffected as possible in the most favourable condition for recovery or escape from attack, and to carry out all measures necessary for the maintenance of the strictest cleanliness in all things. Quarantine, which at the best is only a poor apology for bad sanitation, is in no way attempted, because experience in India, as recently in Egypt, has proved it to be as useless and unnecessary as it is injurious, cruel, and impossible. Epidemic cholera spreads somewhat like dengue or influenza. Dengue is endemic in Calcutta, but occasionally it prevails as an epidemic. When this happens, as in 1872, it invades in a few weeks almost three-fourths of the population. What the factor may be, the absence of which at one time tends to minimise the disease into an insignificant endemic, and the presence of which, at another period, exaggerates it into a widespread and disabling epidemic, we, it must be candidly confessed, do not know. Neither do we know anything very definite about the influence which, at certain seasons, may with fatal effect lay prostrate with influenza many members of the community. So it is with cholera. We may infer from its behaviour that its diffusion is favoured by some powerful factor or influence, of the nature of which we are in complete ignorance, often operating, at particular seasons, with great and mortal rapidity, upon persons inhabiting certain areas of country. It would therefore be about as reasonable to attempt to quarantine cholera, dengue, or influenza, as it would be to quarantine the east wind. As regards the uselessness of quarantine, Dr. Ewart was in full accord with the views enunciated by Professor de Chaumont and Dr. Lewis. He had, when at the head of the Calcutta General Hospital, supplied Drs. Lewis and Cunningham with the material for their inquiry into the causes of cholera. He had watched the progress of the investigation with intense interest. These gentlemen were in direct contact with the cholera discharges in their workroom—often in their private apartments—in all stages of metamorphosis and decay; and that they did all this with complete impunity is as far as it goes, and it must be admitted to go a long way, in favour of the non-contagiousness of the malady. He had restricted his remarks to a plain statement of facts derived from long acquaintance with endemic and epidemic cholera. His experience, he has good reason to believe, is that of most physicians in India, who have seen the malady and formed an independent judgment on the question. It has been confirmed by what has happened in Egypt. He would, in conclusion, beg the meeting, constituted as it was of many distinguished men, from different parts of Europe, to pause before it gave its sanction to quarantine, or opposed the enlightened views of Dr. de Chaumont, who, in his able, learned, and thoughtful paper has produced abundant evidence to convince the most sceptical that this is certainly not the way to prevent or mitigate the diffusion of cholera with the desired amount of success.

Sir JOSEPH FAYRER said that he spoke with much hesitation on this subject, but he felt that it would not be right of any medical officer who had some twenty-four years' experience in dealing with cholera to withhold communicating it on an occasion like the present. Notwithstanding this long experience he felt that he was totally and absolutely ignorant of the cause of the disease. He fully endorsed all that had been said yesterday by Drs. Lewis and Ewart in connexion with this subject. He had himself seen hundreds of cases of sporadic and of epidemic cholera, but had seen nothing to make him think that there was anything whatever of a contagious character in connexion with the disease. He was well aware that many of his countrymen thought otherwise, but still he felt bound to make his own confession of faith. A great deal had been heard of a cholera germ, or of a cholera poison; but neither had as yet been discovered, though he did not for a moment deny that it may exist. Thus far it is merely a matter of evidence. The question of quarantine is one of great importance, and in Europe it practically resolves itself into framing regulations for dealing with cholera. As regards the hygienic measures which should be adopted in dealing with the drinking water and so forth, he would advocate their adoption as strongly as the strictest believer in germs or in special water poison could do, but he did not do this because he believed that a specific cholera germ exists, but because he felt sure that, during seasons, when cholera influences were abroad, any dietetic irregularity, such as partaking of unripe fruit or the indiscreet administration of a purgative, such as a dose of sulphate of magnesia, might suffice to determine the active development of the disease. As regards the theory propounded by M. Van Lieer that cholera was due to some subterranean volcanic disturbances, he would point out that, as regards the parts of Bengal where the disease was endemic, no evidence of such influences had ever been recorded, and that consequently he could not accept the view that had been put forth. He had, however, embraced the opportunity which this paper had furnished of enabling him to continue yesterday's debate on quarantine, of which, owing to the lateness of the hour, he could not then avail himself.

REPORT OF THE METROPOLITAN BOARD OF WORKS.

THE Metropolitan Board of Works have recently issued their Annual Report for the year 1882, and though the duties of this Board cover much ground that has no medical interest, yet each report contains valuable information as to works which are of the highest sanitary importance to Londoners. During the year in question two new sewers were laid from Clapham to Vauxhall-bridge, and from Kennington Church to Vauxhall-bridge, with outlets into the river, their special object being to relieve the southern high level sewers in times of heavy rain, and to carry the storm-waters direct into the river, so as to reduce the tendency to floodings, which various districts have heretofore been subject to when heavy rain occurred. Numerous lines of relief-sewers, storm-overflows, &c., have been constructed in other parts of London; but works which had been in contemplation at Barking and Crossness in connexion with the need for more storage capacity, so as to obviate the necessity of allowing any portion of the sewage to be discharged at flood-tide, have been allowed to stand over, pending the issue of the report of the Royal Commission appointed to inquire into the pollution of the Thames by means of the metropolitan sewage. As to this inquiry the Board renew in the annual report their objections to the presence of Dr. Williamson and Mr. J. Abernethy, C.E., on the Commission, on the ground that they had previously expressed themselves adversely to the existing outfalls. The high standing of these two gentlemen should, however, be a sufficient guarantee that they will judge impartially on the whole circumstances as placed before them, and their competence fits them well to serve as Commissioners.

A large number of street improvements, some in actual progress, others in contemplation, are discussed, and as regards the demolition of property which will be necessary in connexion with the new streets from Tottenham-court-road to Charing-cross, and from Oxford-street to Piccadilly-circus, it is stated, as regards the former, that the Board are awaiting the required relaxation of the stringent conditions imposed on them with respect to the provision of new dwellings for the working people to be displaced by the improvements; and, as regards the latter, that no action will be taken until so much of the property has been acquired as will enable the Board to proceed with the work in its entirety. In referring to the Public Parks and Open Spaces, the report alleges that in attempting to prevent certain games from being played on the West Heath, their object has solely been to preserve from destruction the ferns and furze which there abound, and which at present afford so much enjoyment to old and young; they also point out that, so far from desiring to prevent such games as cricket from being played, they have in other parts of the Heath spent considerable

sums of money in providing suitable places for that purpose. The action of the Board with regard to the proposed Paddington Park Bill is also fully explained, but, as is well known, the scheme of the promoters met with an adverse decision from the Select Committee of the House of Commons before whom it came. We earnestly trust, however, that efforts will be renewed to secure for Paddington the additional open space which is still available, but which cannot remain so for an indefinite period. Coming to the question of an improved water-supply for the metropolis, we are reminded that the intention to secure the appointment of a separate water authority has apparently been abandoned by the Government in favour of leaving the duty to the new municipal corporation which has yet to be created, and a fear is naturally expressed that under these circumstances some time must elapse before the representatives of the water consumers are allowed to have any voice in the matter. As the result of the Order issued by the Privy Council under the Contagious Diseases (Animals) Act, 1878, the Board have done good work in connexion with the dairies, cowsheds, and milk stores. Under this Order 14,201 persons have now been registered, 931 being occupiers of licensed cowsheds, and the remainder being dairymen or milksellers only. Many of the worst metropolitan cowsheds have been abolished through the opposition which the Board has raised to the renewal of licences; the plans of all new sheds must be submitted to the Board; and even old ones which cannot be regarded as satisfactory have been materially improved as respects drainage, ventilation, lighting, cleanliness, &c. Steadily a diminution of private slaughterhouses is in progress under the Board's surveillance. At the date of the passing of the Slaughterhouses, &c. (Metropolis) Act, 1874, there were as many as 1429 of these places, but by the elimination of the worst the number has been reduced to 853. The offensive trades are also subject to the Board's supervision, and considerable progress is stated to have been made at many of such establishments towards their being carried on without causing nuisance. There has also been constant inspection of the houses registered under the Infant Life Protection Act. There are now thirty-three such houses in the metropolis, and every effort is made to detect and punish infringements of the Act. The amendment of this Act with a view to its being made more efficient is much needed, but no opportunity has as yet occurred for giving effect to the Board's wishes in this respect.

PROFESSOR ATTFIELD ON THE FUTURE SUPPLY OF DRUGS TO THE PUBLIC.

AT the opening meeting, on Tuesday last, of the twentieth session of the British Pharmaceutical Conference, held this year at Southport, Professor Attfield, who for the second time presided, delivered an address on the above subject. The Professor said that a year ago he had spoken of the relation of pharmacy to the State, and now he desired to look at the relation of the State to pharmacy. He had described what pharmacy was doing and could do for the State; now he wished to consider what the State was doing and could do for pharmacy, in the interests of the public. A crisis in pharmacy was fast approaching. The aim of the Act of 1868—the proper supply of trustworthy drugs—was being seriously thwarted. The Act said that no person should take the title of "chemist and druggist" and practise under it unless, after satisfying State examiners that he was properly qualified, his name was duly enrolled on a State register. It was possible for an unregistered and even utterly unqualified person to act as a chemist and druggist. This was not then foreseen, but it was exactly what was happening. Shops indistinguishable in appearance from those of registered chemists and druggists were opened by unqualified and unregistered men who were retail distributors of drugs bought wholesale—men knowing nothing of the danger of the articles they dealt in and having no sense of responsibility. These sham chemists and druggists, and many of the general shopkeepers referred to, sold all the things that were sold by the qualified druggist, except the few more virulent poisons scheduled in the Pharmacy Act, the profit on which, to the authorised dealers in them, was very trifling. To supply the sham druggists wholesale houses had arisen of whose competence there was no guarantee. The assumption of Parliament was that the public were to be protected by the qualification of the retailer, and the nature of the business in a wholesale house rendered it impracticable to look to it for the security of the public. The law must look to the retailer; it contemplated the supply of drugs by properly qualified persons only, and that intention was being extensively frustrated. Drugs of nearly all kinds, simple and compound, were being indiscriminately sold by unqualified persons. Many of these sold the drugs at cost price or very small profit as mere baits to catch customers. This was very unjust to men who had qualified themselves for a responsible calling in the manner prescribed by Act of Parliament, and who were gradually losing their means of livelihood; but it was far more serious for the public. They could more or less judge of the quality of food, but they could not protect themselves in the case of drugs. They could not, in this case, rely on the Acts against adulteration, because Nature yielded drugs which varied much in quality, and of that only an expert could judge. Analysts as such could not be familiar with the conditions of purity and strength. The Pharmacy Act also was incomplete. Where the public could not protect themselves the law allowed exceptions to the rule of free trade; it did not permit free trade in some poisonous drugs. A line was drawn between some poisons and others; that line ought to encircle all poisons; nearly all drugs were poisons more or less; therefore nearly all drugs should be excluded from the area of free trade. Its doctrines did not apply to pharmacy. There could not well be freedom where the power of judging was all on one side. Pharmacy was partly a trade, partly a profession. The sale of an ounce of rhubarb was a commercial transaction; advice as to the dose or mode of administration introduced the professional element; but the still more important question whether the article was good or worthless turned on the vendor's knowledge, chemical, botanical, pharmaceutical. In those subjects he was educated and examined. The purchaser was not in a position of freedom; he needed external protection, and therefore the law had rendered illegal the use of the title "chemist and druggist" by unexamined or unregistered men. The failure of the Act had arisen from adopting a wrong method of protecting the public; it was that of raising a legal fence around the mere name. It was now seen that the method which ought to have been adopted was that of rendering illegal the retail sale of the simple and compound drugs of the "Pharmacopœia" (with certain exceptions) by any but registered chemists and druggists, with the saving of all rights to medical practitioners. Information had been obtained from about 200 fairly representative districts in England and Scotland, by specific answers to questions which abundantly proved that potent drugs were being largely sold by general shopkeepers. Their price lists named all drugs except virulent poisons, some of which were concealed under other names. The prices would allow of only the smallest trading profits. Unfortunately, the public did not realise the position in which they stood to the real chemist and druggist; the trading side of his work obscured the professional side. The effects of the present condition of things were evident in the falling off of the business of real druggists, the discharge of assistants, and the closing of shops. In ten years the population had increased by nearly 11 per cent., and registered chemists had increased by 2 per cent.; that number had risen from 13,216 to 13,447; and some whose names were on the Register did not practise pharmacy. As to the kind and numbers of unqualified persons dealing in drugs the evidence was overwhelming, and 75 per cent. of his correspondents complained more or less bitterly of the depreciation in the value of their business through this unqualified competition. In the case of one large store the manager admitted that the drug counter did not pay except as an advertisement of the rest of the concern. The co-operative stores differed from the sham druggists' shops in being carried on by seven owners or more instead of one. A store company might even sell poisons if a registered assistant was employed; but an unregistered shopkeeper must not sell poisons even though he employed registered assistants. This was surely one law for the store and another for the shop. Many of his correspondents gave facts and figures showing the serious depreciation in the value of old-established businesses exposed to unqualified competition. Only in six cases had there been an increase in purely pharmaceutical business. Many druggists were

gradually becoming general traders on account of the falling off in their pharmaceutical business. Their unqualified rivals often sold drugs of very inferior quality, and the Food and Drugs Act would only reach cases in which medicines were sold without their chief ingredients because they happened to be legal poisons. Public officials sometimes expressed wonder as to the destination of all the worthless or partially spoilt drugs exposed for sale in the wholesale markets; but the information supplied by his correspondents would satisfy that wonder. Only 19 per cent. of his correspondents thought that the question was affected by physicians prescribing concentrated medicines—a practice which once threatened to diminish the druggist's income, but which had gradually been relinquished; still there were cases in which medicines were ordered to contain poison enough to kill several persons. Pharmacy was, however, affected by the fact that we took less physic than we did formerly. At St. George's Hospital the cost of drugs per patient had fallen from 16*s.* 5*d.* in 1830 to 7*s.* 11*d.* in 1880. Hospitals and charitable institutions supplied advice and medicines gratuitously to many persons who could well afford to pay both the doctor and the druggist. In the interest of pharmacist, physician, and patient, the patent medicine question needed consideration with a view to reform. Patent medicines contained poisons and useless substances. The well-trained druggist could prevent much mischief resulting from the careless or ignorant use of a potent remedy or thoughtless reliance on worthless materials. The sale of patent medicines should therefore be restricted to qualified and registered chemists. The illusory guarantee of the Government stamp should be got rid of, and the revenue raised by a licence to sell patent medicines or all medicines. A minor cause of depression in pharmacy was that many chemists had thoughtlessly encouraged the purchase wholesale, and the retail distribution of packed or packeted goods instead of themselves preparing such articles, and so transforming themselves into mere trade agents for goods which could easily be dealt in by others when the trade was established. Worse still had been the action of chemists in not enforcing the law against the supply of bad drugs. If forced by circumstances wholesale druggists would do the retailer's duty of packing goods in retail parcels and sell them to any distributors, and the mischief which followed was that unqualified wholesale dealers would start up, and that wholesale houses in other trades would begin to deal in drugs. Pharmacy had been affected by the general depression, but his correspondents stated that the depression in pharmacy was far greater than in other callings. The proportion of medical men who dispensed their own medicines had greatly increased. Often the prescription of the physician was intercepted by and dispensed by the medical practitioner. It seemed as if we were returning to the days of the apothecary and the drug grocer; but this would be retrogression and degradation. But the condition of things, it might be hoped, was temporary. The medical man knew more of medicine than before and had many more subjects to study, and he therefore could not have the old apothecary's or the modern druggist's knowledge of pharmacy. A better knowledge of the laws of life and health rendered medical practitioners and drugs and druggists less necessary to the world than they were sixty or seventy years ago. These very men, by their researches and discoveries freely communicated, had most largely contributed to this advancement in the wisdom and welfare of mankind, and none gloried in it more than they did. But the labourer for the good of all was at least worthy of reasonable reward when employed in his calling. The State said that the pharmacist must be apprenticed, educated, examined, registered; and then the State permitted untrained, uneducated, unexamined, and unregistered men to deal in drugs. The requirements of the State were devised in the interests of the public, and in their interests ought to be a reality. Did the purchaser of cheap physic reflect what would be the consequence of ignoring skill when trustworthy medicines were required in cases of sudden and serious illness? A mother purchasing paregoric free from that opium to which in proper proportion much of the efficacy of the medicine was due would get into the habit of giving enlarged doses. Some day paregoric of proper strength was obtained, the usual large dose was administered, and then all efforts to rouse the child were unavailing. The remedy for the present evils was merely an extension of the principle and letter of the Pharmacy Act. A score of medicinal substances were deemed poisons, and were to be sold retail, as a rule, only by registered chemists and druggists. Let that list be considerably extended, saving all rightful interests. Let the retail sale in open shop of most of the simple and compound medicines of the British Pharmacopœia be carried on only by qualified druggists. The machinery of the Pharmacy Act is ample if inspectors be employed to see that unqualified traders do not infringe it. In sparsely populated districts let drugs be sold by unregistered persons in secured packages, but only as agents for responsible and registered chemists. The information he had gathered should satisfy every Englishman that there was a serious breach in the relation of the State to pharmacy; and he commended that information, with the accompanying arguments, to Parliament, the press, and the public, having no doubt that one hour's attention to the matter from every thinking man would gain his vote for a reform of the law in the direction he had advocated.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Guildford Rural District.—This district had in 1882 a birth-rate of 32·0 per 1000, somewhat lower than that for England and Wales, and a death-rate of only 12·5, whereas the death-rate for rural England amounted to 17·0 per 1000. The zymotic death-rate is also less than half that for rural England. Several of the more important portions of the district have been supplied with a wholesome water from the chalk range, and a constant high pressure service is to be delivered. Measures are also in progress for the establishment of a suitable hospital for infectious diseases. Mr. Joseph Smith deals in detail with the outbreak of diphtheria at Pirbright, in the investigation of which he was associated with Mr. W. H. Power, and as to which we recently commented at some length. The main interest of the outbreak had reference to its connexion with school operations, the disease ceasing each time the schools were closed and reappearing when they reopened. Mr. Smith feels himself unable to decide whether the recrudescence was due to retained infection, or to some unknown cause coming into operation only when a number of children were brought together. Every precaution was taken to remove all sources of infection, but we have already expressed an opinion that mild attacks which were not detected may on each re-assembling have been the principal cause in furthering the spread of infection. Since Mr. Smith wrote this report he has resigned his appointment. The excellent work he has done in this district will, we trust, result in lasting good to the health of the population.

Cambridge.—The birth-rate and also the death-rate are both reported by Dr. Anningson to have steadily decreased since 1877, the latter amounting in 1882 to 16·2 per 1000 living. Scarlet fever was somewhat prevalent in the district; but, fortunately, the provision of the means of isolation needed for dealing with this disease appears to be now decided on. The state of Romsey Town remains very bad; it contains some two hundred dwellings with no better means of excrement disposal than leaky or overflowing cesspools and "guzzle-holes," the roads are often mere quagmires, and the district is evidently in urgent need of being provided with the ordinary sanitary requirements of a populous locality. Dr. Anningson also refers to the fact that the arrangements relating to internal drainage in Cambridge are of special importance, for the public sewers are not ventilated, and by consequence the pressure of pent-up gases is at times very great.

Dublin.—Dr. C. A. Cameron reports that for the year 1882 the death-rate for Dublin was 27·2 per 1000, and high as this is, it is decidedly below the average rate during the period 1872–81. The only disease that was epidemic was measles, which caused 275 deaths in January and February. The deaths from fever were 195 in the year, 74 of these being registered as due to typhus. Large improvements are evidently needed in connexion with the state of house drains. The officers of the sanitary authority are constantly dealing with complaints as to this. They make no charge for opening up the drains, but if a new house drain is required, the

Public Health Committee are willing to construct it and only to charge the owner or occupier of the house with the actual cost of the work, plus a small percentage to pay for interest on the money, the Corporation having a fund for this and kindred purposes. We may assume that this work, being carried out under the advice of Dr. Cameron, is done in the best-known method, and that a current of fresh air is secured through the house drains by one of the methods shown in the illustrations of the annotated edition of the model bye-laws which are issued by the Local Government Board in this country. A large number of dwellings of the poorer classes are closed as unfit for human habitation by the action of the Public Health Committee, and in view of this it is sincerely to be hoped that the Corporation will no longer delay taking action to spend the money already voted for the purpose of providing proper dwellings for the labouring classes. Dublin unfortunately still contains as many as 11,269 privies, and the state both of privies and ash-pits is to a large extent very defective. Fortunately, every effort is made to abolish the privies, and during the past year 2000 additional waterclosets were constructed, a large number of the existing ones being trough-closets. A public abattoir has been provided, but it has not secured the abandonment of the private slaughter-houses to the extent that was hoped for.

Hazel Grove.—In the Hazel Grove district of the Stockport Union many sanitary improvements have of late years been carried into effect; a good water-supply has been brought in, sewerage works have been carried out, and the house drains are looked to. The death-rate is low—namely, 14·8 per 1000, and there is not much sickness.

East Dereham.—According to Mr. Vincent's annual report mischief was done in this urban district by means of exaggerated reports as to the prevalence of fever in it, and the authority are shown how a system involving the compulsory notification of diseases would prevent the recurrence of such a state of affairs. In one respect the Local Board of Health are taking retrograde action. Thus, they have abandoned the system of public scavenging, and though the adoption of this step has incidentally done good by securing the substitution of waterclosets for privies, yet precisely the same effect could have been brought about had the authority continued to remove all house refuse, whilst securing bye-laws imposing the duty of privy cleansing on the occupier at such intervals as would have made it irksome to comply with. As it is, deposits of house refuse about houses are probably encouraged.

Newton Abbot.—In this rural district a series of attacks of diphtheria occurred last year. No local conditions could be found with which the outbreaks could be associated as regards causation, and in most cases no antecedent attacks were heard of. Somewhat similar outbreaks had occurred in one place eighteen months, and in another two years and a half before; and it becomes a question how far certain cases of "ordinary sore-throat" can have constituted a link between the several occurrences. A peculiarly gloomy and wet season was, in Mr. Armstrong's opinion, conducive to the production of the disease.

SUBURBAN DRAINAGE.

The Local Government Board, in reply to an application from the Hendon Sanitary Authority to borrow £62,000 for sewerage and sewage disposal works, has, in according its sanction to a modification of the scheme, recommended that the Brent Valley main sewer from Millhill to the outfall, and the Silk Stream Valley sewer from Sunnyfields to the outfall, should be carried out at once.

SEWERAGE AT BOURNEMOUTH.

Mr. J. F. Harrison, Local Government Board inspector, is of opinion that money should not be expended on the proposed scheme of improving the sewerage of Bournemouth by lengthening the pier outfall until the experiment of flushing the sewers with water from the Bourne by means of an automatic flushing tank has been tried and failed.

BELFAST WATER-SUPPLY.

The subject of the water-supply to this town is at present exciting considerable interest, the Belfast Water Commissioners on the one hand asserting that the water, although not filtered, is of a very superior kind, while there are others who regard it as of an entirely opposite character. At a late meeting of the Belfast guardians, Dr. Corry referred to this matter, and stated that so far back as 1872 he forwarded for analysis to Professor Wanklyn samples of the ordinary town water, and also samples taken from the pump in the workhouse grounds. The result of this analysis demonstrated that the water was so gravely affected with impurities as to be altogether unfit for use for domestic purposes. In consequence of this report, Dr. Hodges was requested by the guardians to make an analysis, and he confirmed the result of Professor Wanklyn's analysis, and showed that the water was scandalously bad. Dr. Corry then proposed that the workhouse well should be closed up, and that filters should be provided for the water supplied to the workhouse, which was unanimously adopted. The Water Board consider that the present impurity of the water-supply is due to exceptional causes, and may not occur again; but Dr. Corry demurs to this, and is of opinion that all the water supplied to them should be filtered at the reservoirs.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5617 births and 3184 deaths were registered during the week ending the 15th inst. The annual death-rate in these towns, which in the three preceding weeks had been 19·1, 19·9, and 20·0 per 1000, declined last week to 19·3. During the first eleven weeks of the current quarter the death-rate in these towns averaged 20·0 per 1000, against 21·0 and 21·5 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 13·2 in Bradford, 14·0 in Bristol, and 14·6 in Derby. The rates ranged upwards in the other towns to 25·0 in Blackburn, 26·0 in Salford, 26·7 in Sunderland, and 26·9 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 618, 752, and 763 in the three preceding weeks, declined again last week to 647; they included 314 from diarrhœa, 111 from scarlet fever, 72 from "fever" (principally enteric), 57 from whooping-cough, 52 from measles, 28 from diphtheria, and 13 from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Birkenhead and Halifax, and the highest in Brighton and Salford. The deaths attributed to diarrhœa, which had been 273, 407, and 463 in the three preceding weeks, declined to 314 last week; this disease was more than three times as fatal in the provincial towns as in London, and caused the highest death-rates in Brighton, Blackburn, and Preston. Measles showed the largest proportional fatality in Brighton and Newcastle-upon-Tyne; scarlet fever in Birmingham and Leeds; and "fever" in Sunderland and Sheffield. The 28 deaths from diphtheria in the twenty-eight towns included 21 in London, 2 in Manchester, and 2 in Hull. Small-pox caused 9 deaths in Birmingham, 3 in Sunderland, and 1 in London. The number of small-pox patients in the metropolitan asylum hospitals, which had been 57 and 60 on the two preceding Saturdays, was 58 at the end of last week; 8 new cases were admitted to these hospitals during the week, showing a further decline from the numbers in recent weeks. The Highgate Small-pox Hospital contained 3 patients on Saturday last, one new case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 148 and 156 in the two preceding weeks, were 157 last week, and 26 below the corrected average. The causes of 72, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Birmingham, Nottingham, Newcastle-upon-Tyne, and in four other smaller towns. The proportions of uncertified deaths were largest in Norwich, Wolverhampton, Halifax, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 22·1 and 19·5 in the two preceding weeks, was 19·7 in the week ending the 15th inst.; this rate was 0·4 above the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 12·8 and 13·7 in Leith and Edinburgh, to 23·6 and 24·5

in Paisley and Glasgow. The deaths in the eight towns included 108 which were referred to the principal zymotic diseases, showing an increase upon recent weekly numbers; 45 resulted from diarrhœa, 21 from scarlet fever, 20 from diphtheria, 12 from whooping-cough, 5 from measles, 5 from "fever," and not one from small-pox. These 108 deaths were equal to an annual rate of 4·6 per 1000, which was 0·7 above the rate from the same diseases in the large English towns. The highest death-rates from these diseases in the Scotch towns last week occurred in Paisley and Glasgow. The 45 deaths referred to diarrhœa showed a considerable increase upon the number in the preceding week, though they were slightly below the number in the corresponding week of last year; 26 occurred in Glasgow, 7 in Edinburgh, and 7 in Dundee. The 21 fatal cases of scarlet fever, of which no less than 19 were returned in Glasgow, showed a considerable increase upon recent weekly numbers. The 20 deaths from diphtheria also showed a marked increase; 9 were recorded in Glasgow and 6 in Aberdeen. Of the 12 deaths from whooping-cough, which showed a decline of 3 from those returned in the preceding week, 10 occurred in Glasgow. The 5 fatal cases of "fever" were fewer than those recorded in any recent week, and included 4 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns showed an increase of 13 upon the number returned in the previous week, and exceeded by 7 the number in the corresponding week of last year. The causes of 80, or 17 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 21·2, 23·4, and 24·5 per 1000 in the three preceding weeks, further rose to 27·5 in the week ending the 15th inst. The mean death-rate in the city during the first eleven weeks of the current quarter was 22·5 per 1000, against 19·2 in London and 16·9 in Edinburgh. The 184 deaths in Dublin last week showed an increase of 20 upon the number in the previous week; they included 20 which were referred to diarrhœa, 8 to scarlet fever, 5 to whooping-cough, 3 to "fever," 1 to measles, 1 to diphtheria, and not one to small-pox. Thus 38 deaths resulted from these principal zymotic diseases, against 31 and 19 in the two preceding weeks; they were equal to an annual rate of 5·7 per 1000, which exceeded that recorded in any week since March, 1882; the rate from the same diseases was equal to but 2·9 in London and 2·9 in Edinburgh. The 20 deaths from diarrhœa exceeded by 8 the number returned in the previous week, and were more numerous than in any week of the year. The fatal cases of scarlet fever, which had been 3 and 2 in the two preceding weeks, rose to 8, a higher number than has been returned in any week since the end of 1880. The deaths from whooping-cough and from "fever" also slightly exceeded those returned in the previous week. The deaths both of infants and of elderly persons showed an increase upon those recorded in recent weeks. The causes of 39, or more than 21 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Deputy Surgeon-General Herbert Taylor Reade, V.C., has retired on temporary half-pay.

ARTILLERY VOLUNTEERS.—5th Lancashire: Charles Joseph Trimble, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Herefordshire: Surgeon Thomas Turner is granted the honorary rank of Surgeon-Major; Edgar Freeman Griffith Morris, Gent., to be Acting Surgeon.

ADMIRALTY.—Fleet Surgeon William James Baird, M.D., has been placed on the Retired List, with permission to assume the rank and title of Retired Deputy Inspector-General of Hospitals and Fleets. Staff Surgeon John Shields has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of September 9th, 1883.

The following appointments have been made:—Surgeon Alexander L. Christie, M.B., to the *Victor Emmanuel*, vice Arthur W. Russell; Surgeon Andrew D. Peyton to the *Jackal*, vice A. L. Christie.

Correspondence.

"Audi alteram partem."

THE CASE OF WILLIAM GOULDSTONE, THE WALTHAMSTOW MURDERER.

To the Editor of THE LANCET.

SIR,—This case occupied the greater part of Friday last, being tried before Mr. Justice Day. The facts were clear. A man, aged twenty-six, after the birth of twins, became depressed, and a week later killed the whole of his five children, drowning the three elder and fracturing the skulls of the twins. There is no doubt about the fact of the killing, and the only plea was that of insanity; and as the case affords another example of the unsatisfactory position in which skilled experience is placed in a court of law I give some particulars. Evidence was given that the prisoner had been a sober, industrious man, fond of his wife and children, and in constant work; there was nothing of special consequence in the case noticed till after the birth of the twins, when he became moody, but on inquiry it was elicited that the prisoner had been in the habit of saying he wished he were dead. He suffered from severe pains in his head at times and was much distressed by a large double hernia. He said to his fellow-workman he wished he were dead; he told me himself, but this was not brought out in evidence, that he had very bad dreams and had seen heaven opened and had heard the voice of God, but, he added, he knew it was only dreaming. Before the murder he said he took some extra drink to fit himself for the perpetration of the crime, and this was one of the most damning pieces of evidence against him. He killed his children in the most deliberate way, locking the door of his wife's room before he killed the babes; when he had killed them he opened the door and said he had done it, thus, as the judge said, showing he knew the quality of the act committed; he also told the policeman he was now ready for the rope, this, as the judge said, showing he was aware of the criminality of the act.

Now for some other facts. His mother is insane, and was said to have been insane when he was born; his mother's sister also is a chronic lunatic, with suicidal inclinations and ideas of ruin impending. On his father's side evidence of one second cousin being insane was given, and it was said several other members of the father's family were insane. But the judge ridiculed the notion of bringing in second cousins, and even threw doubt upon my *bona fides* when I said that marked insanity on one side, and taint, though distant, on the other would increase the risk of insanity in the offspring. Counsel were not allowed to ask what my opinion was of the sanity of a man who had behaved as the prisoner had, and so my evidence was reduced to the very bald statement that at the time I saw the man he was not a marked case of insanity. I do not know how one is ever to get the legal mind to see that every insane person is not a raging lunatic.

The prisoner is just what one would have expected from his history; a feeble minded, rather weakly, good man, who did his mechanical work well, and went home to his family. Anxiety about his increasing family at once developed the latent weakness, and he feared ruin, just as so many lunatics do, and took an insane way to get out of the trouble. If this man is hanged, I think it will be a scandal to law, or rather justice.—I am, Sir, yours obediently,

Bethlem Hospital, Sept. 14th, 1883. GEO. H. SAVAGE, M.D.

HOMŒOPATHY.

To the Editor of THE LANCET.

SIR,—It is a subject for much regret that anyone, more especially the editor of our leading medical organ, should deem my offer to St. George's Hospital to be disrespectful to the medical profession.

No one more highly appreciates the honourable, humane, and learned character of medical men than myself, and amongst those in orthodox practice I am proud to number many of my oldest and dearest friends. Nevertheless, it is impossible to ignore surrounding facts. At the present moment some thousands of duly qualified medical men are following the system of Hahnemann, while hospitals in

every civilised country are publicly testing its value. Further, the most popular work on therapeutics amongst the rising generation of students—Sydney Ringer's—owes much of its fame to the promulgation of a series of specifics, mostly traceable to homœopathy—a system which is allowed, even by its greatest opponents, to be largely permeating general practice. Impressed with the excellence of much that is advocated by the homœopathic school, and still more impressed by the practical results constantly brought under notice in hospital and private practice, the writer was induced to endeavour to bring about a public test of the efficacy of the new treatment, and observing that a number of beds were unoccupied in St. George's Hospital from lack of funds, the offer referred to in your last issue was made. It will hardly be necessary to add that I have no interest in any system of medicine. My only desire is that that which is most efficacious in the treatment of disease should be adopted; and I know of no better plan for discovering this than the establishment of test beds under proper conditions and for a sufficient period to avoid the possibility of chance. If the result should be adverse, it will do more to discourage homœopathy than reams of print; if otherwise, surely the members of a progressive profession would be the first to acknowledge, and rejoice at, such an outcome of the experiment.

I am, Sir, yours faithfully,

The Boltons, S.W., Sept. 1883. WM. VAUGHAN MORGAN.

*** Our correspondent does not seem to be aware that homœopathy scarcely exists *as understood by Hahnemann*. Its most popular exponent in London has published a new doctrine of therapeutics, directly contradicting Hahnemann's fundamental principle. We published last week the suggestion of a Hahnemannian journal, to drop the word "homœopathy" out of existence, as the only means of averting the imminent dissolution of the school. We are quite aware that there is a section of the public that believe in homœopathy; but they are attended by those who have abandoned all its essential principles while still retaining the name. The argument that homœopathy only needs a trial is quite untenable. It has been on its trial eighty years—as long, in fact, as vaccination. While vaccination is accepted by the whole world of scientific and rational men, homœopathy is without a chair in any university of Europe, and it is proposed by its own leaders to drop the very name. The attitude of scientific medicine to it *ab initio* is thus thoroughly justified. The attempt to take shelter under the name of Dr. Sydney Ringer is now rather a favourite device of homœopaths. But it will not save either their scientific or their moral position. Dr. Ringer takes medicines as he finds them, and investigates their action in health and disease unhampered by authority, and he does not trade on a name.—ED. L.

SULPHUR FUMIGATION IN CHOLERA DISTRICTS.

To the Editor of THE LANCET.

SIR,—I observe in THE LANCET of July 28th that you mention the plan of disinfection of the cholera districts in Egypt by sulphur fumigation. Since 1872 I have steadily advocated this method of disinfection in India by means of sulphurous acid, and have now the pleasure to forward the last edition of my pamphlet on the subject. Since its publication I have received additional testimony of its efficacy. At Bombay, during the last epidemic there, it was adopted, and the disease ceased almost immediately after the fires were kindled, with an immunity from it as had not been known for five years.

In 1882, when cholera was very virulent at Dumdum, and in all the villages near the cantonments, till at last it appeared in the Sudder Bazaar, sulphur fires were adopted extensively. The disease ceased in a most marvellous manner, and not a single case occurred in the Border Regiment stationed there. Sulphur fires should be kept burning through the streets for several days, at distances of twenty or thirty yards, where cholera is virulent. Every house where cholera has occurred should be evacuated and thoroughly disinfected with sulphurous acid, and the floors and walls disinfected with carbolic acid or phenyle. Furniture should be taken out or covered, as the fumes might fade the colours. A very easy means of disinfection of houses can be effected by the inhabitants evacuating them temporarily, and burning sulphur for a few hours, or in different rooms alternately.

I trust you will give me the credit of being the first to initiate this plan of disinfection by noticing my pamphlet in THE LANCET. Some years since I forwarded you a copy, which was made mention of in a short paragraph. I quite agree with you that street fumigation is not sufficient, but it can be pushed still farther by burning sulphur in all infected houses, streets, or gullies. Liquid sulphurous acid might be sprinkled on walls and floors. The measure has been so entirely effectual in India that I feel sure you will do me the justice to review my *brochure*, for the benefit of the profession and the public.

I am, Sir, yours very truly,

JOHN E. TUSON, M.D.,
Deputy Surgeon-General, Presidency District.

Calcutta, August 22nd, 1883.

"ABERDEEN ROYAL INFIRMARY."

To the Editor of THE LANCET.

SIR,—I must ask you to kindly correct in your next issue a statement which I find in THE LANCET of to-day, page 480, under the above heading. It is said by your correspondent in the paragraph I refer to, that "Dr. Walter, of Manchester," was a candidate for the office of superintendent of the Aberdeen Infirmary, a statement I may say that is as unfounded as it is ridiculous. Doubtless it has originated in a printer's error, but nevertheless I shall be glad to see in THE LANCET your correspondent's explanation.

I am, Sir, yours truly,

WM. WALTER, M.D.,
Honorary Surgeon to St. Mary's Hospital for Women and Children, and the Manchester and Salford Lying-in Hospital.

Sept. 15th, 1883.

*** The mistake, which we regret, occurred as Dr. Walter suggests. It was Dr. Wattie who stood second for the appointment referred to.—ED. L.

"HUDDERSFIELD URBAN DISTRICT."

To the Editor of THE LANCET.

SIR,—In your notice to-day of my report on the health of Huddersfield during 1882, you say, "Measles is one of the diseases which has to be compulsorily notified under the Local Act, but isolation is regarded as impracticable, &c." This way of putting it is somewhat misleading, for measles is not one of the diseases included in the first paragraph of the definition of infectious disease in our Act. It is not therefore a disease which has to be compulsorily notified under ordinary circumstances. Measles is augmented, however, in the second part of the definition as a disease which, by a resolution of the sanitary authority and due notice by advertisement, can be included in the definition and dealt with as one of the "infectious diseases." In the spring of the present year, with the experience gained from the epidemic of 1882, I requested our sanitary committee to take the necessary steps to so include it, but they did not accept my view of its importance, and as the question is not without difficulty, I could not press it.

I am, Sir, yours faithfully,

Huddersfield, Sept. 15th, 1883. J. SPOTTISWOODE CAMERON.

BIRMINGHAM.

(From our own Correspondent.)

SMALL-POX.

SMALL-POX still continues its sway, and gives rise to many false alarms and rumours among the timid and nervous portion of the population. Thanks to the indefatigable and intelligent Chairman of the Health Committee of the Town Council, we are enabled to obtain the actual truth of its proportions, and to derive confidence from the assurance that the authorities are quite equal to deal with the number

of people infected. During the week ending Sept. 15th there were fifty-seven fresh cases reported, the total number remaining in the hospital being 122. Six deaths occurred, four of which were unvaccinated, and the other two only imperfectly, the marks being very faint. Much disturbance and a great deal of ill-feeling have arisen in the neighbouring parish of Aston with regard to the site of a small-pox hospital, and, as usual, an amount of sentiment has taken the place of reason in the controversy. Those who are interested in the matter would do well to read the remarks on this subject in THE LANCET of Sept. 15th, where they may probably derive more information than local experience is ever capable of attaining. Meanwhile, the question of dealing with the outbreak remains in a provisional state, a site being occupied under the strong protest of a number of the inhabitants. *A propos* the spread of this infection, a case was brought before the police-court on the 14th inst., where clothing had been taken without previous disinfection from a house in which small-pox existed, and received at a pawnbroker's. The defendant was fined one shilling a day and costs. Doubtless this constitutes a fertile source of infection generally, and deserves to be more frequently brought under notice by the sanitary powers.

DEATH OF DR. HUNT.

By the death of Dr. Hunt the Queen's Hospital loses one of its honorary physicians, a valuable and efficient officer, and a courteous colleague. Dr. Hunt came to Birmingham in 1857 as house-surgeon, subsequently as ophthalmic surgeon, and in 1878 was elected as one of the physicians. His untimely death by pyæmia following a small operation for hæmorrhoids is an illustration that dire events from trivial causes occasionally spring. His loss is much regretted by a wide circle of friends, who recognised the worth of his quiet, unobtrusive manner, and his zealous regard for the interests of the institution he served so faithfully and well.

STREET RUFFIANISM.

In common with most large towns, Birmingham is subject to its share of cowardly and brutal assaults by the roughs who infest certain localities. Stabbing appears to have been in the ascendant lately, and one hospital has three cases at present as in-patients from this cause. Until some more rigid punishment is meted out to these ruffians, we shall hardly fail to be rid of the pest, or feel secure in the districts where these scenes occur. Justice is certainly slow, and may be said also not to be always impartial. Two cases I note during the last few days in our local papers; one in which a man brutally kicked and beat the woman he cohabited with, and according to the evidence was seen by the policeman not only to kick and strike, but to jump upon her while lying upon the ground. He was fined ten shillings and costs! In another case a man was fined twenty shillings and costs for striking his wife and "discolouring her eye!"

SCOTTISH NOTES.

(From our own Correspondent.)

COTTAGE HOSPITALS.

SOME time ago I endeavoured to show in this column the peculiar necessity there was for one or more small hospitals, or a county hospital, to be placed in the more thickly peopled district of Fifeshire. The density of the population, the number of colliery and other accidents, and the distance from any large hospital are sufficient to indicate the need; and there are so many public-spirited gentlemen there that the movement only needs friendly conference to assure consummation. Mr. Wemyss, of Wemyss Castle, has set an excellent example by the erection of hospital buildings near Kirkcaldy, accommodation being provided for cases of infectious disease and for accidents. There will be in all twenty beds; but as sixteen of these are devoted to fever cases, there is room for considerable addition to the surgical department. The recommendation of fit cases is left in the hands of the medical men, and each inmate will be attended by his own family doctor. An extension of this scheme would be attended with the best results, and the maintenance of these district hospitals seems to be achieved without detriment to the larger institutions.

DEATH OF MR. JOHN ROBERTSON, F.F.P.S.G., AIRDRIE.

This gentleman, who so long ago as 1827 took the licence of the Faculty of Glasgow, died last week after a lingering illness. He commenced his studies in Glasgow University nearly seventy years ago, and when qualified started in practice in Airdrie. Though afterwards made a Fellow of the Faculty and a member of several medical societies, he did not long continue the arduous work of a practitioner in a mining district. He entered into many schemes as a mine owner; but, besides attending to these matters, he devoted a large amount of his time to parochial and county affairs.

FEIGNING DEATH.

We are just at present threatened with an epidemic of such emotional diseases (?) as are rather rare so far north; and as it is not unlikely that the partial success attending the cases mentioned below may induce others to attempt similar deception, it will be well to acquaint your readers with the ways of these shams. One case occurred in Dunfermline, the other in Edinburgh; but probably the latter city will not in the future be considered a fitting field for the operations of these malingerers. The woman who had there feigned serious illness in the police cells, and formerly fainting fits, was actually conveyed to the infirmary, and then assumed a death-like state. A threat, however, to remove the body to the mortuary, aided by an energetic galvanic shock, was quickly effective, though similar treatment had again to be resorted to in the police cells. The interesting Dunfermline visitor, who was certainly not a Blue Ribbonite, caused some confusion in the prison during the night by indulging in certain fits to such an extent that the doctor was sent for. This gentleman—probably after a very hurried inspection—stated that death had occurred some hours before, and a post-mortem was proposed. Some time afterwards a second examination was made, when signs of life were detected; but it was only after the suggestion of a post-mortem and a threat of the galvanic battery that she rose to her feet, nothing amiss, walked round the cell, and afterwards enjoyed her breakfast. It should be said that the hour of visit to the Dunfermline case was 4 A.M.; but the mistake which occurred will be useful to police surgeons generally, whose patients are often so repulsive as to render a minute examination a most disagreeable duty. No suggestion of catalepsy has been made in either case, so that the parts must have been carefully rehearsed.

COLLIERY ACCIDENTS.

I would beg to direct the attention of men practising in mining districts to the publication of a useful pamphlet by one of their brethren in the coalfield of Fifeshire. Within a few pages the writer deals with the immediate treatment of the injured in mines. He may be fully understood by the average pitman, and this or similar pamphlets should be scattered throughout mining districts with lavish hands. I believe this method of ambulance teaching was recommended by a large employer of labour; and, if I mistake not, these instructions have been written by Mr. T. Goodall Nasmyth, M.B., of Cowdenbeath, Fife. All who practise in these districts know the amount of suffering, and often the avoidable deaths, due to the want of intelligent management before the arrival of the doctor. It is from this period that many compound fractures date, and ignorant handling results in many deaths from bleeding.

BELFAST.

(From our Correspondent.)

RETIREMENT OF PROFESSOR REDFERN.

IT is with sincere regret that I have to announce that Dr. Redfern has resigned the Chair of Anatomy and Physiology in Queen's College, Belfast, which he has occupied for the past twenty-three years. Prior to his coming here Dr. Redfern held for fifteen years the corresponding Chair of Anatomy and Physiology in Aberdeen, so that he has been engaged in professorial work for thirty-eight years. During the time that he has been connected with Queen's College, Dr. Redfern has done much to raise the Medical School in Belfast. When he was appointed Professor there were 100 medical students in attendace at the

College, while last year the number had increased to upwards of 360; and during the twenty-three years of his term of office at Queen's College more than 4000 students have passed through his classes. He will now receive a retiring pension in accordance with the provisions of the Irish University Act. Dr. Redfern was at various periods a member of the Senate and examiner in both the Queen's and Royal Universities, and he was also an examiner in the University of London, of which he is a distinguished graduate. There can be no doubt that Dr. Redfern's resignation is a serious loss to Queen's College, Belfast, where his great and deserved reputation did much to attract medical students. As a lecturer, Dr. Redfern had few equals, and none who have had the privilege of attending his classes will ever forget the extraordinary clearness and unusual force and eloquence with which he was accustomed to deal with questions of anatomy and physiology. He always seemed to be at his best when demonstrating an abstruse piece of anatomy. There are few of his students who will not retain a vivid recollection of the enthusiastic way in which he used to explain the reflexions of the peritoneum or demonstrate the connexions and relations of the deeper parts of the head and neck. Although his collegiate work was arduous, he has at times voluntarily given popular lectures in connexion with different associations of ladies and gentlemen in Belfast. These lectures were no less instructive, able, and popular than his collegiate teaching, and were calculated to strengthen a feeling of interest among the citizens of the town in the great educational work of Queen's College, Belfast. The chair of anatomy and physiology at Queen's College is worth between £1200 and £1400 per annum, and the appointment, as indeed with all the College Chairs, is made by the Lord Lieutenant, who, it is generally understood, is influenced in his choice by the President of the College. It is rumoured that already some distinguished men are in the field.

PARIS.

(From our Paris Correspondent.)

A DISPUTED FEE.

A MOST unusual case was lately brought before the Tribunal of Bordeaux, in which a medical man claimed 1500 francs for an operation (artificial fecundation) he had performed on a lady, which the husband not only refused to pay, in consequence of non-success, but he in his turn claimed damages for the bodily injury inflicted on his wife, as the latter complained of pains in the uterine region, which she said resulted from the operation. The judge, in pronouncing judgment, observed that it was one of the most disgraceful cases he had ever had to deal with, stigmatised the operation and the operator as being most immoral, and severely admonished the husband and wife for the part they took in the affair. Consequently the doctor not only did not obtain his fee, but was condemned to pay the costs of the trial.

THE DIET OF DOGS.

The last meeting of the Academy of Sciences was taken up with the quantity and quality of food suited for dogs in a state of domesticity. In a paper giving the result of his experiments, the author has come to the conclusion that an ordinary adult dog can digest a quantity of meat varying in weight from one-tenth to one-sixteenth of the weight of its body. Under the influence of cold, the weight of the ration absorbed was increased and under warmth it was diminished. Cold infusion of coffee administered to a dog increased its appetite; it ate a quantity of meat equal to one-eighth of the weight of its body. But when the meat was mixed with bread, starch, and other farinaceous substances, the weight of the ration absorbed was notably diminished; the animal got thin, sometimes phthisis supervened, and death followed. The author concluded with the remark that a diet, whatever be its nature, cannot be suddenly changed without producing disorder in the economy. A diet exclusively carnivorous, though better suited to the constitution of the dog in a state of liberty, would be prejudicial to the animal in a state of domesticity. A mixed diet is therefore clearly indicated in the latter condition.

INTERNATIONAL SOCIETY OF ELECTRICIANS.

A Society of Electricians is being formed in Paris under the patronage of the Minister of Posts and Telegraphs. The society is open to foreigners; and to become a member it is necessary to be presented by two titular members. The annual subscription is twenty francs. For further information, application should be made to M. Georges Berger, Société Internationale des Electriciens, 90, Rue de Grenelle, Paris.

ASTRONOMICAL CATALOGUE.

Those of your readers who are interested in astronomy may be pleased to know that the Observatory of Paris is about to publish a general catalogue, containing a list of the stars observed in Paris during the last forty-five years, from 1837 to 1881 inclusively. The number of observations which this catalogue will contain amounts to 300,000, of which 120,000 were taken during the last five years. For each star the co-ordinates (*co-ordonnés*)—that is to say, the elements by the aid of which the position of a star can be found in the heavens—are given. The number of stars thus classed in the celestial regions amounts to 40,000.

A VENERABLE DAME.

At Aubérine-en-Royans, a village in the Dauphiné, situated between Valence and Grenoble, may be seen an old woman living in a hut in a narrow street who has reached the extraordinary age of 123 years. She has no infirmity except slight deafness, being in full possession of her mental faculties. Her age as given above is authentic, and according to her marriage certificate she completed, in January last, her 100th year since marriage. The old lady was a "cantinière" under the First Empire, and had two sons killed at the battles of Friedland and in Spain. She is supported entirely on the alms given her by visitors who go from great distances to see her as an object of curiosity, and her neighbours help her to do her household work. She lives almost exclusively on soup made with bread, to which is added a little wine and sometimes a little brandy. Dr. Bonne, who practises in the neighbourhood, states that she is never ill. Her skin is like parchment, but she is comparatively upright, and is of scrupulously clean habits.

A propos centenarians, I may mention that M. Chevreul, the venerable member of the Academy of Sciences in the Section of Physics and Chemistry, has just entered his ninety-eighth year. His mental faculties are quite sound, and he attends regularly the meetings of the Academy.

Paris, September 18th, 1883.

CHOLERA IN EGYPT.

(From our Special Correspondent.)

THE outbreak of cholera has all but subsided, except in Upper Egypt. Dr. Haddad, who is at present at Assiout, has made diligent inquiries regarding the time of its first appearance there, and finds that whereas the disease was first officially reported to have broken out in that district among refugees from Cairo, on July 28th, there were in reality many cases of an exactly similar nature in the months of May and June, and the citizens of Assiont were astonished to read in the newspapers that cholera had appeared at Damietta at the end of June, the same disease apparently, from its symptoms, that they had had in their midst for more than a month.

A French paper here, the *Phare d'Alexandrie*, published a telegram the other day from the Governor of Zagazig to Salem Pasha, which said: "The English doctor has left, glory be to God! Shall I stop everything he has begun?" For the publication of this the *Phare* has received an *avertissement* of warning from the Minister of the Interior.

The following is a copy of a letter in reference to the Mecca pilgrims, which may be of interest:—

Copy of a letter (circular) addressed by the Minister of the Interior to the President of the Maritime and Quarantine Sanitary Board.

Août 9, 1883.

A S. E. le Président du Conseil Sanitaire Maritime et Quarantenaire,—Attendu qu'il a été décidé au Conseil de Santé et d'Hygiène publique d'interdire, dans cette année, le départ des pèlerins égyptiens pour les contrées du Hedjaz,

vu qu'ils pourront y importer l'épidémie et qu'à leur retours il serait fort à craindre qu'ils ne l'importent une autre fois en Egypte, les Conseil des Ministres a dans une de ses séances, après délibération décidé ce qui suit. Attendu que le pèlerinage est un devoir religieux à l'accomplissement duquel le Gouvernement ne saurait s'opposer; qu'il est prouvé, par la décision de la Conférence Sanitaire Internationale de Constantinople, que les caravanes, voyageant par voie de terre, ne pourront porter le maladie, ni en allant ni en revenant, la distance entre ici (l'Egypte) et le Hedjaz étant assez longue; qu'il est reconnu, scientifiquement et médicalement, que si le voyage de ces pèlerins pour les contrées de Hedjaz s'effectuerait par voie de terre ils ne pourraient importer la maladie avec eux, pas plus qu'à leur retours ils ne l'importeraient pas dans le pays, contrairement à ce que pourrait arriver si le pèlerinage aurait lieu par voie de mer, car ils seraient capables, vu la courte distance, de porter la maladie dans les lieux de destination, il fut décidé, tant pour préserver les lieux saints du danger de l'épidémie que pour mettre à l'abri de tout malheur les pèlerins musulmans qui, de tout côté, viennent les visiter, d'interdire tout départ, par voie de mer, pour les contrées de Hedjaz et d'effectuer le voyage du Mehmet Chérif ainsi que de tous les pèlerins égyptiens par voie de terre. Il est toutefois nécessaire de mettre devant les yeux de ceux qui désireront partir tous les obstacles et difficultés qu'ils auront à subir et à rencontrer à la suite des quarantaines ou de toute autre chose. Celui qui malgré tout cela décidera de partir serait éclairé et prendrait alors toutes les précautions et mesures nécessaires pour être à même de surmonter toutes ces difficultés et payer les frais extraordinaires que pourrait nécessiter la situation ou il se trouvera. Le Conseil de Santé et d'Hygiène publique ayant approuvé ce qui précède, ceci fut écrit à V. E. afin que vous en ayez connaissance et que toute personne désireux d'accomplir ce devoir religieux en soit également informée. Un peskeret lui serait livré, en cas où il déciderait de partir.

Alexandria, Sept. 10th, 1883.

Obituary.

SURGEON P. MACPHERSON GRANT.

THIS deserving young officer, at the age of thirty-four, has fallen one of the first victims to the recent outbreak of cholera in India. In the district of Western Malwah, where Dr. Grant was stationed as medical officer to the First Central India Horse, the disease had made its appearance by the beginning of July, at which time there seemed to be little indication of the outbreak assuming a serious form. On the 16th of that month he was called on to attend a case occurring in the regiment while he himself was suffering from the effects of an attack of malarial dysentery, and on the following day he experienced some of the premonitory symptoms of cholera. These symptoms for a while passed off, but recurred with renewed violence on the morning of the 18th, and the disease ran its course to a fatal termination, which took place early on the morning of the 22nd.

Dr. Grant had been in the Indian Medical Service since 1877, and during his short career had earned for himself in a high degree the respect and affection of his fellow-officers and the men of the various regiments to which he had been attached, as much on account of the untiring attention he bestowed on those under his care, whether native or European, as on account of his professional skill and attainments. He received his education at the University of Edinburgh, in which city, after taking the degrees of M.B. and C.M. in 1870, he held various hospital appointments. He afterwards spent some time in Berlin and Vienna in order to perfect his knowledge of the diseases of the larynx, with the view of devoting himself specially to that department of medical science. He was, however, subsequently induced to turn his attention to the public service, and accordingly entered himself for the Indian Medical Competitive Examination in 1876, when he passed fifth on the list. On leaving Netley, he gained one place in the final examination, and now stood fourth, being at the same time first in the department of Hygiene. Before leaving for India he took the B.Sc. degree at Edinburgh in 1877. His first station in India was at Mian Mir, and towards the end of 1877 he accompanied the troops against the Jowaki Afridis, where he served with distinction. On the cessation of hostilities, he took duty on the Cashmere frontier among the fugitives from the famine at that time existing in the Cashmere Valley, and while engaged on this service he contracted typhus fever, to which he nearly succumbed. On his recovery he was attached to the Central India Horse, and in 1880, during the war in Afghanistan, served for some time as surgeon on General Roberts's staff, and afterwards received the respective medals for this and for the Jowaki campaign. During his career in the service, Surgeon Grant established a reputation with his superior officers, both in the medical and military departments, for abilities of a high order, and for a thorough devotedness to every call of duty. He had the happiness of gaining the esteem and affection of those with whom he was brought in contact for his genuine goodness of heart and never-failing considerate attention to all.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Sept 13th:—

Greenwood, Cecil Danforth, Offerton-road, Clapham.
Honan, Lynton Michæl, High-street, Clapham.
James, Henry Daniel, Woodland-terrace, Babbicombe, S. Devon.
Passmore, G. Shapland, North Radworthy, North Molton, N. Devon.
Richards, William, Bath-row, Birmingham.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Milward Edw. Dovaston, University College Hospital; Jenkyn Lewis and Frederick Wm. Vernon, London Hospital.

At the Preliminary Examination in Arts, held at the Hall of the Society on September 13th, 14th, and 15th, 128 candidates presented themselves, of whom 85 were rejected, and the following 43 passed and received certificates of proficiency in General Education:—

SECOND DIVISION (in alphabetical order):—Edward Buller Allen (E.M.), Valentine Evelyn Barrow, Louis Beckett (E.M.), Daniel Booth (E.M.), Ivan John Howard Boyton, Graham Wilmot Brooke (E.M.), Frank Calder (E.M.), Percy Tranto Carpenter, Wm. Burwell Darroll, Fredk. Arundel Done, Geo. Tolcher Eccles (E.M.), Wm. Henry Fred. Godwin (E.M.), Arthur Stephen Hanson (E.M.), Henry Hamilton, Wm. Edmund Hardy (E.M.), Richd. M'Donnell Hawker, Geo. Herbert Humphreys (E.M.), Cyril Ireland-Smith, Theophilus Nicholas Kelynack, Fred. Wm. Lewitt (E.M.), Ernest Andrew Long (E.M.), Stoupe M'Chance (E.M.), Matthew Lovell Mackintosh, Edward Charles Mahany (E.M.), Chas. Reginald Morley, Horace Young Nutt, John Griffiths Owen, Kilham Roberts (E.M.), Cyril Walrond Shaw, Alexander Sharman, Gilbert Arthur Sumner, Jenan George Thomas (E.M.), Nigel Alan Allison Trenow, Basil Riddell Trevelyan (E.M.), Arthur Turner (E.M.), Chas. Stuart Vines (E.M.), Charles Frederick Myers Ward (E.M.), William Timmins Ward, John Houghton White (E.M.), John James Winn.

The following passed in Elementary Mechanics alone:—

Edwin Thomas Larkham, Henry Nichol, Reginald Field Walker.

E.M. Passed in Elementary Mechanics.

AT Cambridge on the 8th inst. the result of the Hospital Saturday collection was represented by the sum of £49 19s. 10½d., an amount considerably above the average.

THE VICTORIA HOSPITAL FOR SICK CHILDREN.—It has been arranged to hold a workmen's demonstration on Sunday, Oct. 14th, in aid of the funds of this hospital.

ON the 12th inst. the new Infectious Disease Hospital at Maidstone was formally opened by the Mayor of the town.

A PUBLICAN at Chester was last week fined 20s. for removing his son, who was suffering from small-pox, from Liverpool to Chester without adopting proper precautions.

AT Kloten, in the canton of Zurich, ninety persons are said to have been poisoned by partaking of the flesh of a diseased calf. In five of the cases the symptoms are so serious as to threaten a fatal issue.

DISEASE AMONGST CATTLE. — Foot-and-mouth disease appears to be attaining alarming proportions in the country. The epizootic exists extensively in Derbyshire, Sussex, Suffolk, Kent, Cheshire, Lancashire, Nottingham, Flintshire, Radnorshire, and Denbighshire, whilst in other counties it is present to a less formidable extent.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.—The Duke of Bedford has sent a donation of £200 to this Association in aid of the £5000 fund for the extension of Provident Dispensaries in London in districts outside the circle occupied by the medical charities of old standing.

NEW IRISH CHALYBEATE SPRING.—A chalybeate spring has been discovered at Belmonte, Rochestown, County Cork, specimens of which on analysis have been found to exhibit carbonate of iron in the proportion of upwards of one grain to the gallon. It is thought that it will be of use as a mild tonic in cases of anæmia, while it has the advantage of possessing an agreeable odour, and is free from the styptic taste so usually accompanying waters containing iron.

ST. JOHN AMBULANCE ASSOCIATION. — Recent advices from Australia report that the "Victoria centre" has been formed at Melbourne, with a branch at its suburb, Brighton, and that steps are being taken to establish other branches throughout the colony. The syllabus of instruction and regulations of the parent association in London are strictly adhered to, and the *matériel* used was issued some months since from St. John's Gate. Classes are also being formed at Naini Tal, North Western Provinces, India.

DWELLINGS FOR THE POOR.—In connexion with the movement recently inaugurated by the Labourers' Union to promote the appointment of a Royal Commission to inquire into the sanitary condition of the houses of the labouring classes in London, a meeting was held on Saturday last, at which a committee was appointed to co-operate with the Association in their efforts to obtain further legislation towards remedying the evils which undoubtedly exist in the domestic accommodation accessible to the industrial poor.

THE LATE DR. LOFTIE STONEY, OF DUBLIN.—At a meeting of the directors of the City of Dublin Hospital held last week, the following resolution was unanimously adopted:—"That at this, the first meeting of the General Board of the City of Dublin Hospital since the death of Dr. J. H. Loftie Stoney, ophthalmic and aural surgeon to the hospital, the directors wish to express their sense of the great loss the hospital has sustained by the removal of so eminent a member on the medical staff, and to offer their earnest sympathy to Mrs. Stoney and her family in their deep and sudden bereavement."

BRADFORD INFIRMARY AND DISPENSARY.—Physicians: Drs. R. G. Alexander, E. T. Tibbits. Surgeons: Messrs. H. Meade, H. M. Spencer, J. Appleyard, Dr. A. Rabagliati. Medical Officers: Drs. J. H. Bell, D. Goyder. House-Surgeon: Mr. W. J. Spence. House-Physician: Mr. H. W. Phillips. The hospital contains 132 beds. Non-resident pupils are received, and have every opportunity of acquiring a practical knowledge of their profession under the superintendence of the house-surgeon. One year's attendance is recognised by the Examining Boards. Fee, perpetual £10 10s. [The above information arrived too late for insertion in our Students' Number.]

PRESENTATIONS.—At a parade of the Ambulance Bearer Section of the Second Hants Rifles on the 3rd inst., a presentation was made by the men of the section to their instructor, Mr. R. T. Cæsar, as a mark of the esteem in which he is held. The presentation consisted of a pair of photographs of the section at ambulance work.—Mr. Edwin Charles Smallman, of Hadleigh, assistant to Messrs. Newman and Norman, has been presented by the Foresters Court "Princess Royal," No. 2948, with a handsome watch and an accompanying address on parchment, in recognition of his valuable and skilful attention to the members of the said court.

NEWCASTLE EYE INFIRMARY.—At a recent meeting of the governors of this infirmary, held at Newcastle, to take into consideration a scheme for the extension of the premises and the increased usefulness of the institution, it was reported that about four thousand cases attended annually, and about forty thousand consultations, represented the gratuitous work done by the medical officers. It was shown that the medical working of the charity was crippled for want of room, and the erection of a new hospital was recommended. The infirmary has been in existence about sixty years. The committee called attention, when treating on finance, to the very inadequate sum received from the Hospital Sunday Fund, and stated the belief that, next to the Dispensary and Infirmary, the Eye Infirmary is made more use of, and is of more immediate service and importance to the artisans of this district, than any other local charity. Before this meeting separated, a resolution, moved by Mr. Jealfreason, was carried to the effect that the recommendation of the committee in favour of the erection of buildings for the purposes of the institution on a site at the east of St. Mary's-place, in this city, and at a cost of about £4000, be confirmed and adopted.

ONE OF THE DIRTIEST DUSTYARDS IN LONDON.—At a meeting of the Bermondsey Vestry on the 17th inst., Dr. Stirling called attention to the report of THE LANCET Special Sanitary Commission on the Dustyards of London, and the remarks therein on the Bermondsey dustyard. He said he himself had visited this dustyard, and found a large quantity of unsifted dust rising to a height of twenty feet, and around it an immense quantity of "soft core." So far as he could see, disinfectants were not used, and no man appeared to be in special authority. He then proceeded to quote from THE LANCET report that the yard in question was "one of the dirtiest and most disorderly dustyards in London." He moved that the matter be referred to the General Purposes Committee to survey and report on the best means of abating the nuisance. Mr. Grece seconded the motion, and said that the whole place was an abomination. Mr. Howes said that some time ago, when he received notice from the medical officer to have his dusthole cleared out, he went to the dustyard to see if that was cleared. He thought he should be near the truth if he said he saw 2000 loads there; there were also about 1000 salmon and lobster tins. After some further discussion the motion was agreed to.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BEVAN, W. L. P., M.B., C.M.Ed., has been appointed Junior House-Surgeon to the Huddersfield Infirmary.

COCKS, HORACE, M.B., C.M.Ed., has been appointed Assistant Medical Officer to the Rubery-hill Lunatic Asylum, Bromsgrove, Worcestershire.

CURRIE, OSWALD J., M.B.Lond., M.R.C.S., has been appointed Senior House-Surgeon to the Huddersfield Infirmary.

GILES, BERNARD FARADAY, M.D.Durh., M.R.C.S., has been appointed Medical Officer of Health for the Wem (Salop) Rural Sanitary Authority, vice J. G. Flinn, resigned.

GORNALL, RICHARD GREGORY, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Newton Heath Urban Sanitary District.

HAMILTON, G. G., L.R.C.P., has been appointed Resident Medical Officer to the Infirmary for Children, Liverpool, vice P. Davidson, M.B., resigned.

HARRISON, EDWARD, M.A., M.B.Cantab., M.R.C.S., has been appointed Junior House-Surgeon to the Huddersfield Infirmary.

HAYCROFT, CHARLES HENRY, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Coldridge District of the Crediton Union.

HEATH, JAMES, M.B., C.M.Ed., has been appointed Junior House-Surgeon to the Torbay Hospital, Torquay.

HODGSON, ISAAC C., M.R.C.S., has been appointed Medical Officer for the Workington District of the Cockermouth Union.

JACOB, E. L., B.A., M.R.C.S., L.S.A.Lond., Medical Officer of Health for the Surrey Combined Sanitary District, has been appointed Medical Officer for the Rural Sanitary District of the Guildford Union.

PRAEGER, E. A., L.F.P. & S.G., L.S.A.Lond., L.M., has been appointed Surgeon to the Church Missionary Society's North-West Pacific Mission, to be stationed at Metlakotla.

ROWE, EDMUND LEWIS, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Second Assistant Medical Officer to the County Asylum at Gloucester.

SEPHTON, RICHARD, L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Warrington Rural Sanitary District, vice Gornall, whose appointment has expired.

STOCK, WILLIAM HENRY, L.F.P.S.Glas., L.K.Q.C.P.I., has been appointed Health Officer for the Shire of Whittlesea, Victoria.

SULLIVAN, RICHARD T., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Officer and Vaccinator for the District of Tweed River, New South Wales.

SYKES, WILLIAM, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Mexborough Urban Sanitary District.

THANE, PHILIP THORNTON, L.R.C.P.L., M.R.C.S., L.S.A.Lond., has been appointed Government Medical Officer and Vaccinator at Walgett, New South Wales.

WILSON, GEORGE, M.D.Ed., F.R.S.E., has been reappointed Medical Officer of Health for the Mid-Warwickshire Combined Sanitary Districts.

Births, Marriages, and Deaths.

BIRTHS.

HARMER.—On the 15th inst., at Northgrove, Hawkhurst, the wife of William Milsted Harmer, F.R.C.P., of a daughter.

KILNER.—On the 15th inst., at Guildhall-street, Bury St. Edmunds, the wife of Charles Scott Kilner, M.B., of a son.

MORRIS.—On the 16th inst., at 63, Montagu-square, W., the wife of Malcolm Morris, of a son.

MARRIAGES.

BURNETT—REES.—On the 11th inst., at the Wesleyan Chapel, Buckland, Dover, James Compton Burnett, M.D., of Hollies-street, Cavendish-square, W., and Pinner, Middlesex, to Katharine, youngest daughter of Rowland Rees, J.P., of the Esplanade, Dover.

FRETZ—KING.—At St. George's, Basseterre, St. Christopher, West Indies, William Henry Fretz, M.R.C.S., F.R.C.P., Government Medical Officer, Nevis, son of J. H. Fretz, P.W.D., Ceylon, to Harriet, youngest daughter of the late Lieutenant W. King, R.E.

WARBURTON—RHYS.—On the 16th inst., at St. Autholicus Church, Nunhead, Edmund Samuel Warburton, M.R.C.S., L.S.A.Lond., Brynfedwan, Treherbert, to Rachel Mary, elder daughter of the late Watkin Rhys, M.R.C.S., L.S.A., Brynfedwan, Treherbert.

WAUGH—ALLEN.—On the 17th inst., at Kingsland Congregational Chapel, by the Rev. Thos. Aveling, D.D., John Waugh, M.A., M.D., 42, Colverstone-crescent, Dalston, to Pattie, daughter of James Allen, Esq., of Soham.

WOINARSKI—ROBERTSON.—On the 26th ult., at Connawarren, Hexham, Victoria, Stanislaus E. A. Zichy Woinarski, M.B., Ch.B., of Ballarat, eldest son of G. G. Zichy Woinarski, Melbourne, to Flora (Teeyah) Dundas Robertson, only daughter of the late Henry Dundas Robertson, Bengal Civil Service.

DEATHS

BROWNE.—On the 6th inst., at Shipston-on-Stour, Worcestershire, Charles Frederick Browne, M.R.C.S., late of Tulse-hill, London, aged 72.

CLOUSTON.—On the 16th inst., at Sandwick Manse, Orkney, Charles S. Clouston, M.D., of Gunnersbury, W.

ILES.—On the 18-19th inst., at midnight, at Watford, Herts, Francis Henry Wilson Iles, M.D., aged 48.

LEWIS.—On the 5th inst., at Ingatestone, Richard Lewis, M.R.C.S., aged 79.

MERRY.—On the 4th inst., at Hemel Hempstead, Robert Rosier Merry, L.R.C.P.Lond., aged 43.

ROBERTSON.—On the 11th inst., at Meadowbank, Airdrie, John Robertson, F.F.P.S.Glas., aged 80.

TWINING.—On the 14th inst., at the Eastern District Hospital, Frank Theed Twining, M.A., M.B.Cantab.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

ASSELIN ET CIE, Paris.

Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris. Tome dix-huitième. 2me Série. pp. 201.

BAILLIÈRE, J. B., ET FILS, Paris.

De la Taille Hypogastrique. Par le Dr. E. Bouley. pp 250 Avec Figures.

BERGMANN, J. F., Wiesbaden.

Die Natur und Behandlung der Gicht. Von Dr. Wm. Ebstein. Mit eingehefteten Atlas enthaltend fünf quarttafeln in Farbendruck.

Die Fettleibigkeit (Corpulenz) und ihre Behandlung nach Physiologischen Grundsätzen. Von Dr. Wilhelm Ebstein. Vierte Auflage.

BERMINGHAM & CO., New York.

Sexual Impotence in the Male. By W. A. Hammond, M.D. pp. 274.

Practical Clinical Lectures on Syphilis and the Genito-urinary Diseases. By F. N. Otis, M.D. pp. 584.

The Diagnosis and Treatment of Diseases of the Ear. By Oren D. Pomeroy, M.D. pp. 302. With 100 Illustrations.

Insanity, its Classification, Diagnosis, and Treatment. By E. C. Spitzka, M.D. pp. 415.

BLAKISTON, SON, & CO., Philadelphia.

Transactions of the College of Physicians of Philadelphia. Third Series. Vol. VI. pp. 451.

BOGUE, DAVID, London.

Phthisis, its Cause, Nature, and Treatment. Part 2: Antidotal Treatment of the Disease. By John Parkin, M.D. pp. 113.

BROWN & CO., Calcutta.

Sanitary Principles, more especially as applied to India. By Surgeon E. J. Thompson, S.Sc.Camb.

CHURCHILL, J. & A., London.

The Law of Sex. By Geo. B. Starkweather, F.R.G.S. pp. 265. With 40 Illustrative Portraits.

The Pharmacopœia of the North-Eastern Hospital for Children. Compiled by a Committee of the Staff. pp. 32.

A Treatise on the Diseases of the Nervous System. By James Ross, M.D., LL.D. Two vols. Second Edition, Revised and Enlarged. pp. 1023-1047. Illustrated with Lithographs, Photographs, and 330 Wood Engravings.

Medical Notes and Essays. By Peter Eade, M.D.Lond. pp. 94.

COLLINS, Philadelphia.

Transactions of the Medical Society of the State of Pennsylvania Vol. XV. pp. 516.

FANNIN & CO., Dublin.

Transactions of the Academy of Medicine of Ireland. Vol. I. Edited by Wm. Thomson, M.A., F.R.C.S. pp. 382. Illustrated.

FISCHER, G., Jena.

Lehrbuch der Vergleichenden Anatomie der Wirbelthiere. Bearbeitet von Prof. Dr. Robert Wiedersheim. Zweiter Theil Mit 261 Holschnitten.

HEYWOOD, ABEL, Manchester.

Study and Stimulants. Edited by A. Arthur Reade. Revised with Additions. pp. 235.

LEWIS, H. K., London.

Asiatic Cholera; being a Report of an Outbreak of Epidemic Cholera in 1876 at a Camp near Murree. By C. M. Jessop, M.R.C.P. pp. 47.

LONGMANS, GREEN, & CO., London.

San Remo Climatically and Medically Considered. By Arthur Hill Hassall, M.D.Lond. New Edition. pp. 230. With numerous Illustrations.

NEW SYDENHAM SOCIETY, London.

Lexicon of Medicine and the Allied Sciences. By Henry Power, M.B., and Leonard Sedgwick, M.D. Eighth Part: Ded—Ect.

PUTNAM'S SONS, New York.

Training Schools for Nurses, with Notes on Twenty-two Schools. By W. G. Thompson, M.D. pp. 57.

SIMPKIN, MARSHALL, & CO., London.

Arithmetical Chemistry, or Arithmetical Exercises for Chemical Students. By C. J. Woodward, B.Sc. Part 2. pp. 96.

SPON, E. & F. N., London.

Workshop Receipts (Second Series). By Robert Haldane. pp. 485. With Illustrations.

TREAT, E. B., New York.

Illustrated Medicine and Surgery. Edited by Professors G. H. Fox and F. R. Sturgis. Vol. II., No. 3.

Transactions of the Vaccination Inquiry. Edited by M. D. Makuna, L.R.C.P.I., M.R.C.S.—Speeches of Mr. P. A. Taylor and Mr. C. H. Hopwood on Vaccination.—Dei Germi ed Organismi Inferiori; Ricerche Sperimentali del Dott. Antonio Ceci.—Le Premier Congrès des Médecins Grecs tenu à Athènes au mois d'Avril, 1882; Compte-rendu sommaire des Séances redigé et publié par le Dr. C. Stékoulis.—Index Medicus, Vol. V., Nos. 7 and 8.—The Outbreak of Cholera in Egypt; by G. V. N.—Journal of Physiology, Vol. IV., with Supplement.—The Present Aspect of the Antiseptic Question; by Edward Lund, F.R.C.S.—A Paper on the Sanitary Clauses of the Draft Glasgow Police Bill; by Eben. Duncan, M.D.—Report on Diseases of Women from the First Congressional District; by Dr. R. J. Nunn, Savannah.—Vagusneurosen; von Dr. Edinger.—A Review of the Scientific Progress of Dental Surgery; by C Spence Bate, F.R.S.—The Compulsory Notification of Infectiou Diseases to Local Authorities; by Dr. A. M. Anderson.—Utilisation of Town Refuse, as Illustrated by the Processes adopted by the Birmingham Corporation; by Lawson Tait, F.R.C.S.—Case of Adeno-Sarcoma of Mamma, removal of Growth, recovery; by James Whitson, M.D.—Studies from the Biological Laboratory of the Johns Hopkins University, Baltimore; edited by Newell Martin, M.A., M.D., and W. K. Brooks, Ph.D.—Engineering Education at Home and Abroad; by Edward Mitchell.—Adherent and Contracted Prepuce; by De Forest Willard, M.D.—Club-foot, simple measures for its early relief: by De Forest Willard, M.D.—Ambulance Service in Philadelphia; by De Forest Willard, M.D.—Le Choléra; by Félix Pequet, M.D.—Guide to Cambridge; by Prof. Humphry.—Du Traitement des Maladies Tropicales dans les Climats Tempérés; par Sir Joseph Fayrer, M.D., et Joseph Ewart, M.D.—The Destruction of Fish by Internal Parasites; by T. Spencer Cobbold, M.D.—Préservation de la Syphilis par le Vaccine, Traitement des Maladies Infectieuses, Hypothèse sur le Rôle des Microbes dans la Formation des Animaux; by W. H. Van der Heijden, M.D.—Observations on the Efficacy of Burning Sulphur Fires in Epidemics of Cholera; by J. E. Tuson, M.D.—Shock; by W. H. Meyers, M.D.—Remarks on Hydrophobia; by C. W. Duiles, M.D.—The Boy's Own Paper, The Girl's Own Paper, Leisure Hour, Sunday at Home, September.—Good Words, Sunday Magazine, September.—Longman's Magazine, September.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

A TUMOUR OF HAIR REMOVED FROM THE STOMACH OF A YOUNG GIRL BY LAPAROTOMY.

THE following case is reported in the *Pester Med. Chir. Presse.* A somewhat anæmic and nervous girl, fifteen years of age, had since her tenth year suffered considerably from chlorotic troubles, which for the last three years were associated with acute indigestion. For the last year and a half an extremely movable tumour was noticed in the abdominal cavity, which was by some taken for a movable kidney, notwithstanding the fact that some of the symptoms were not in accord with this diagnosis. The pains finally became so severe that laparotomy was performed, when the tumour in the stomach was found to be made up of short hairs, mixed with vegetable cells, starch grains, &c. It weighed 283 grm., and was 13½ ctm. long, 10½ ctm. broad, and 5½ ctm. thick. It was compact and superficially very black. The result of the operation was complete relief. The patient acknowledged that for the past four years she had been in the habit of biting off the ends of her hair and swallowing them. The majority of her schoolmates did the same, believing it would give them clear voices. Seven similar cases occur in the literature of the subject, and one case is recorded where a malignant tumour of the stomach and intestines proceeded from this cause.

Ne Sutor.—A coroner would act very culpably who received and paid for the evidence of an unqualified assistant in place of that of his principal. A verdict founded on such evidence would have no more value than one arrived at without medical evidence.

"CEPHALOTRIPSY."

To the Editor of THE LANCET.

SIR,—I beg to refer Mr. Grün for information as to the rules on which a cephalotribe should be constructed to Barnes's "Obstetric Operations."

As against Mr. Grün's half-yearly average of rather less than fifty maternity cases, I can contrast about 1000, which came under my care whilst resident-accoucheur at the London Hospital, when I had several opportunities for studying and for performing cephalotripsy. In two cases I have operated with my own instrument with exceedingly satisfactory results.—I am, Sir, yours faithfully,

Tynemouth, Sept. 18th, 1883. CHAS. EGERTON JENNINGS.

To the Editor of THE LANCET.

SIR,—It seemed to me that Mr. Jennings's letter on this subject was both timely in its appearance and sensible in its deductions, and surely it is not necessary, as Mr. Grün appears to think, to have a large number of cases, requiring perforation and crushing, in order that a mechanical mind should see that an improvement might be effected in the instruments used in the operation, and I, for one, think that if Mr. Jennings has found the instrument which he describes useful, if only in a few cases, it is only rational to suppose that the same instrument will be equally valuable in all cases of craniotomy.

It has been my lot to perform or assist in performing the operation seven times; two of the patients died, and here, thoroughly endorsing Mr. Jennings's opinion of the importance of operating early, I will confess that these two deaths might possibly have been averted had the surgical interference been carried out in an earlier stage and the medical attendants been possessed of better extracting instruments. The reluctance to destroy the child is naturally great, but this should not justify us in placing the mother's life in jeopardy by waiting until dangerous symptoms appear, as, I fear, is sometimes the case.

In conclusion, I think the thanks of practitioners are due to Mr. Jennings if he can help us, by designing an instrument, in more easily completing the obstetric operation in question.

I am, Sir, yours obediently,

September 18th, 1883. STENSON HOOKER, L.R.C.P. & S., &c.

THE BIENNIAL EXAMINATIONS OF MARSEILLES.

A. E. D.—The biennial examinations take place in April and September of each year, but the exact dates must be obtained by the candidate from the Secretary of the Medical School at Marseilles. Candidates with foreign degrees or diplomas are required to pass only three examinations (examens de réception), which are as follows:—1. Anatomy and physiology. 2. Medicine, surgery, and accouchements. 3. Clinical medicine and surgery, materia medica and therapeutics. The fees, including inscriptions and diploma, amount to 848 francs 50 centimes. The candidate has to pay all the fees, although exempted from the necessity of passing the preliminary examinations. The following text-books are recommended to be read for the occasion:—Manuel d'Anatomie, by Fort; Manuel de Physiologie, by Fort; or Cours de Physiologie, by Kass and Duval; Manuel de Pathologie Interne (Medicine), by Fort; Manuel de Pathologie Externe (Surgery), by Moynac; Manuel Pratique de l'Art des Accouchements, by Verrier; Manuel de Pathologie et de Cliniques Médicales (Clinical Medicine), by Moynac; Leçons de Clinique Chirurgicale (Clinical Surgery), by Léon Labbé; or Résumé de Pathologie et de Clinique Chirurgicales (Clinical Surgery), by Fort; Manuel de Matière Médicale (Materia Medica), by Bouchardat; Manuel de Thérapeutique (Therapeutics), by Paulier.

Physician.—We differ entirely from our correspondent in the view we take of the order to which he refers and of its consequences.

Sigma.—Colonel Sir E. F. Du Cane, R.E., K.C.B., Surveyor General of Prisons, Prison Department, Home Office.

Dr. Sharkey.—Next week.

MEDICAL EDUCATION IN THE STATES.

To the Editor of THE LANCET.

SIR,—In the letter of "A British Practitioner Resident in the States," published in a recent issue of your journal, it is stated that the University of Pennsylvania, while requiring the same duration of medical studies as Harvard, does not require the student to pass an entrance examination. This is an error. An admission examination to the medical department is required by this university of those students who do not possess a collegiate degree or present evidence of the required qualification. The examination includes as yet but English composition and physics; that of Harvard includes, in addition, a single language (ancient or modern), but has had a decided effect in improving the general literary attainments of our classes. It is intended to gradually increase the stringency of the examinations and the number of subjects, until the requirements of the admission examination are equivalent to those of a degree in Arts.

I am, Sir, respectfully yours,

JAMES TYSON, Sec. Faculty of Medicine.

Med. Department, Univ. of Pennsylvania,
Sept. 6th, 1883.

To the Editor of THE LANCET.

SIR,—A correspondent, who signs himself "A British Practitioner Resident in the States," writes disparagingly in your journal of August 11th about medical education in this country. He states that Pennsylvania University has no preliminary examination in general education, which is not true; and that examination is held at different places—for instance, Chicago and San Francisco—annually. There are in this country a number of colleges, besides Harvard and Pennsylvania, whose course embraces three or more winter sessions, which require a preliminary examination, such as Yale, Michigan, Syracuse, Albany, and Howard Universities, and Michigan College of Medicine, Detroit, whose preliminary examination is recognised by the British Medical Council. The New York City colleges have a matriculation examination, which is recognised by the Royal College of Surgeons of England, but it is optional with the students. About 90 per cent. of the medical students of this country could pass the matriculation examination of the London University, and though some of the best schools require only two courses of lectures, yet the majority of the graduates are third or fourth course students. There are always present at the examinations, besides the professors, delegates from the State medical societies or censors, and the examinations of the first-class schools are undoubtedly equal to the majority of British corporations and universities, and graduates of the same who bring proof of a sufficient general education, and of having studied medicine for four or more years, should unquestionably be allowed the same privileges in Great Britain as British graduates are allowed here. If the New York City schools and Jefferson College, Philadelphia, would lengthen their course to four years respectively, every respectable school in this country would follow suit.

I am, Sir, yours, &c.,

Sept. 1883. ANOTHER BRITISH PRACTITIONER RESIDENT IN THE STATES.

*** We can only say that if, as our correspondent asserts, 90 per cent. of the American students can pass such an examination as the matriculation examination of the University of London, it is a pity they have not the opportunity of doing so, both for their own sakes and the reputation of American degrees, which cannot be respected abroad so long as the guarantees of preliminary education are withheld and short curricula are the rule.—ED.

A PROJECTED HEALTH CRUISE.

REFERRING to our annotation in last week's LANCET under the above heading, and the benefits to be derived from a sea voyage in the large passenger steamships of the day, we have had our attention drawn to a projected "health cruise" in a large schooner yacht of over 300 tons, which vessel is to leave England in October for the more salubrious islands and ports in the Atlantic on a six months' voyage. As advantages are claimed the fact that only eight patients are taken, whose comfort is attended to by two medical men, that all the vibration and noise caused by engines is abolished, and that coal-dust, smoke, and the disagreeable smell of oil are absent, this scheme will be hailed with satisfaction by many medical men at a loss how to do the best for their patients. We understand that Dr. Allen, 1, Oxford-mansions, W., is the projector of this scheme.

M.B., C.M.—The medical professor should try to get a medical registration system sanctioned by Parliament in the colony.

MEDICAL OFFICERS OF HEALTH AND CERTIFICATES OF DEATH.

To the Editor of THE LANCET.

SIR,—Has a medical officer of health, in making his returns of the deaths in his district to the rural sanitary authority, the power to set aside the certificate of death, conscientiously given by the medical man in attendance on the patient whose death he has certified; and has he, the medical officer, any authority to substitute another cause for such death and present it to the sanitary authority without any communication with, or the concurrence of, the aforesaid medical man in attendance?

I am, Sir, yours truly,

September 18th, 1883. ELDNUR.

*** There is no rule as to this. It is very undesirable to alter the mortality statistics, the more so as the death certificate having once been given, the death will appear in the Registrar-General's return under the original heading. Cases do, however, occur in which medical officers of health append explanatory notes to their statistics, giving the grounds on which they find it necessary to differ from the practitioner who may have given a certificate which they do not regard as correct. Thus, "typhus" deaths are often, in country places, explained as being really due to enteric fever. Even in such cases it is, if possible, desirable to confer in the first instance with the medical practitioner who gave the certificate; but where this is not practicable, the medical officer of health should have regard to the duty he has to his authority, and explain to them what he believes to have been actually the cause of death. Needless comment on death certificates given by registered medical practitioners should, of course, be avoided.—ED. L.

"HOLIDAYS AT SEA."

To the Editor of THE LANCET.

SIR,—Your article on "Holidays at Sea" has induced me to take the liberty of asking why to the health-giving properties of a life on the ocean wave the benefit of a sea bath cannot be added? When taking short pleasure voyages, the sea being calm and translucent and the weather warm, fellow-passengers have frequently exclaimed to me, "How I should like a swim just now!" On inquiring of the officers of the vessel why the way of the ship could not be stopped for fifteen or twenty minutes every morning, if a sufficient proportion of the passengers expressed a wish to have a dip, various reasons have been alleged against such a proceeding, but none have seemed to me valid. By drawing a screen across the quarter-deck it would be very easy to arrange matters without causing the slightest annoyance to any lady on board. A boat would, of course, be lowered, and the bathers might dive from this, or from the ship's counter, or from a hanging platform under it. Passengers availing themselves of these arrangements would, no doubt, gladly pay a small fee to recompense the ship's company for any trouble they might be put to.

I am, Sir, yours obediently,

September 18th, 1883. H. J. J.

"HOSPITAL NURSES."

To the Editor of THE LANCET.

SIR,—I am thankful to see the letter on the above subject in your issue of Sept. 1st. Will you allow me to say a few more words on the subject? In reference to "days off," medical men do not need to be reminded that there is no "day of rest" for hospital nurses. They work seven days in the week. I think this fact seems sometimes forgotten by the committees or other authorities who frame the rules to which the nurses are subject. I know of at least one London hospital where the fortnight's holiday is the sole break, in the year's work, to which the unfortunate nurses are entitled. That is to say, out of 365 days of work, their generous employers give them fourteen in which they may take rest and recreation. In this hospital the night nurses are often obliged to attend two mornings in the week on out-patients under some doctor; thus they lose their exercise hour, as well as having from two to three hours' extra work after being on night duty. They are cruelly treated in these respects, and the sooner they get relief the better, for some excellent nurses are breaking down under the system.—I am, Sir, yours obediently,

Sept. 13th, 1883. N. S.

REMARKS ON HYDROPHOBIA.

As an interesting, lucid, and pleasant brief paper on hydrophobia, we may call the attention of our readers to some remarks by Dr. Dulles, read before the Philadelphia County Medical Society. Dr. Dulles would strongly recommend every investigator to peruse a very valuable series of articles—not referred to by a single writer on hydrophobia—on the physiology and pathology of the saliva, by Dr. Samuel Wright, which were published in THE LANCET during 1842 and 1844. Dr. Dulles gives a brief sketch of the history of rabies in regard to the various features of the disease. The amount of information pressed into eight pages is truly remarkable.

Alpha Beta.—We assume that B. was asked to see the case by S. We think that S. had a right to have a second opinion on the case if he wished for one; but it seems to have been unnecessary, as R. had agreed to pay the costs. Further, we think that B. should have given notice to A. of his visit or visits. We scarcely see that A. was quite right in giving up the case unless the visits of B. were very frequent.

TREATMENT OF HEART DISEASE.

To the Editor of THE LANCET.

SIR,—The note of "Medicus," in your last issue, on the treatment of "cardiac vegetations" by the injection of some solvent into the blood, prompts me to suggest a plan of treatment for tumours which has occurred to my mind—viz., the injection into them of some digestive fluid. *A priori* one would be led to conceive that the result of such a plan would be in some cases to set up a local inflammation similar to that produced by irritants such as iodine, but of less intensity, while in others it would produce disintegration of the tumour, the débris of such process being either absorbed into the system, drying up, or proceeding to the formation of an abscess. In the latter case the virulence of the inflammation would probably be less than when inorganic substances are injected. If the process of disintegration changed the inherent characters of the tumour, then there would be no danger, from absorption of the products, of a systemic infection in cases of malignant tumours; while if such products were not absorbed by changing the character of the growth, a standing danger of systemic infection would be removed. The amount of change to be produced in a growth would be regulated by the amount of solvent injected, and the danger of healthy tissues being involved in the process would be reduced to a minimum.

I do not know whether my idea is original or not, or whether some objection may not be urged against it which does not at present suggest itself to my mind. The plan seems to me worthy of trial in cases of tumours or hyperplasiæ resisting the usual modes of treatment, or which are beyond the pale of the surgeon's knife.

I am, Sir, yours truly,

Sept. 16th, 1883. R. P.'

SULPHO-CARBOLATE OF SODA A REMEDY AGAINST BEE-STINGS.

To the Editor of THE LANCET.

SIR,—The following case may prove of some interest to your readers. Mrs. T——, married, aged forty, consulted me upon Aug. 25th, having been stung by a bee upon the upper part of the forehead. I was unable to discover the exact position of the sting, the whole of the face being in such a swollen condition. I therefore prescribed a hot soda bath, a saline aperient, and lead lotion to be applied to the face. On the following morning I was hastily summoned to the patient's house. I found her suffering from great nervous excitement, at times delirious, the head and neck enormously swollen; the upper and lower extremities were cold, stiff, and also much swollen; pulse almost imperceptible; breathing laboured. I returned home and, with the aid of a brother practitioner, discovered in an old medical journal that Dr. Klamann had given carbolic acid hypodermically in a similar case with success. I, however, tried fifteen grains of the sulpho-carbolate of soda in an ounce of water, every four hours, which was administered with some difficulty, with the following results. After the second dose the swelling and other symptoms rapidly diminished in intensity, she became bathed in a profuse perspiration, and, during the administration of several more doses, the patient steadily progressed towards convalescence.

I am, Sir, your obedient servant,

THOMAS EDWARDS, M.R.C.S., L.R.C.P. & L.M.

Harrold, September 4th, 1883.

A SUBJECT FOR EXPERIMENT.

To the Editor of THE LANCET.

SIR,—As an answer to your article on "Meat" in this week's (Sept. 15th) issue, I beg to offer myself as a person the medical profession may perform experiments upon for any space of time, from one week upwards. I will live as I often have lived—that is to say, I will live absolutely without animal food. I feel that, if I could get several medical men to take this matter up, the fact that flesh food is not necessary to health or life would be proved. As medical men are fond of experimenting upon the lower animals perhaps they will consent to make use of one of their own kind. Trusting you will find room in your journal for this offer,

I am, Sir, faithfully yours,

F. P. DOREMUS,
Hon. Sec., National Food Reform Society.

Rochester-road, N.W., Sept. 19th, 1883.

A CONVENIENT AND SAFE METHOD OF TRANSMITTING BOTTLES BY PARCELS POST.

MESSRS. FERRIS & CO., of Bristol, have prepared a series of postal boxes designed specially for the use of medical men who may have occasion to send mixtures by the parcels post. The boxes are lined with corrugated paper, and are made in various sizes adapted for the reception of 4 oz., 6 oz., 8 oz., and 12 oz. mixtures respectively. Liquids which are securely packed can now be sent by post, and country practitioners will no doubt find these boxes convenient.

R. P.—We are not aware of any advantage likely to arise from joining the society.

ROAD VENTILATORS AND THE DISPOSAL OF SEWAGE.

To the Editor of THE LANCET.

SIR,—I do not think that anyone who reviews the history of the drainage of towns can help feeling amused at the battledore and shuttlecock policy which has hitherto been pursued. In the first instance the sewage was carried off by means of open drains, but after a time these were considered, and very rightly so, a nuisance and a source of danger, and as a consequence closed drains were constructed underground. Unfortunately this method of drainage caused the deleterious gases to find their way into the houses along their course, and the result has been we have gone back to the open sewer, and what seems to me a more dangerous form, for antiseptic though the air is, such volumes of gas are forced into certain limited areas as greatly to interfere with its purifying influence. There can be no question that it is better to discharge noxious sewer gases into the upper stratum of air than just below people's noses, and the system which we have lately adopted at Surbiton seems likely to accomplish this end. Ventilating shafts are constructed by the side of a certain number of houses along the highest portions of the main sewers, and Banner's cowls being placed on the top of each one, the air is sucked through the open gratings, and conveyed through the shafts into the air above. Road gratings, which before were a nuisance, have, since the adoption of this system, become quite free from smell. Again, in the first instance the sewage was disposed of by being turned into the river, but this it has been decided is a nuisance and a danger, and is no longer to be permitted; and the proposal now is to convey it to the sea, so as to vitiate the air of the towns which are built upon the coast; for I contend if an almost unlimited quantity is poured into certain limited areas it must become more or less of a nuisance. Besides, disposing of sewage in this way seems to me to be more or less a sin, since it is throwing away that which is really a valuable and useful commodity.

I am, Sir, your obedient servant,

Surbiton, Sept. 1883. F. P. ATKINSON.

ABNORMAL EAR SYMPTOMS.

To the Editor of THE LANCET.

SIR,—I would thank you or any of the many readers of THE LANCET for an opinion on the following case.

A European, aged thirty-eight, residing fifteen years in this colony, contracted in 1878 a chancre, which was followed by roseola. He thinks he underwent then a treatment with mercury and iodide of potassium. In 1881 he suffered from a kind of eczema on his head and the left little finger; it lasted about four months, and was not treated. In November, 1880, he complained of earache on both sides, and was ordered leeches, immediately after the application of which his present ailment commenced. Since then it has been unaltered till now. When sitting erect every sound which reaches his ear is to his hearing continued like the tone of a piano when the pedal is played. To get rid of this trouble he only needs to bend forward until his head and body are in the horizontal position, when his hearing becomes almost normal. Compression of the venæ jugulares seems to have no effect. Several renowned European aurists whom he consulted all agreed in declaring his ears normal as far as objective examination goes. I have tried iodide of potassium, and, later, application of the constant current to the cervical sympathetics, but without any effect whatever.

I am, Sir, yours very obediently,

Soerabaya, Fava, July 25th, 1883. P. C. LARSEN, Danish Physician.

A WARNING.

To the Editor of THE LANCET.

SIR,—May I put your readers on their guard against an impostor. I have been informed by several friends that a man, who adopts many aliases, has called upon them to solicit their charity, and among others has mentioned me as recommending him to them. He states that I have employed him to do clerical work in connexion with the Collective Investigation Committee. It is true that a person called upon me, stating that he was sent by Professor Humphry, who told him that I might find some work for him; his tale was so plausible that I gave him some circulars to address and employed him for a day; meanwhile, having communicated with Professor Humphry, I found that his tale was utterly false, and the following day I dismissed him, followed, unknown to himself, by a couple of detectives whom I had obtained for the purpose. The next I heard of him was from one of these detectives, who informed me that he was to appear at some police court charged with obtaining money by false pretences, with what result I never ascertained. I hear, however, that he is still about and preying on the unwary, and that he makes good capital out of the day's work I gave him.

I am, Sir, yours faithfully,

September 19th, 1883. F. A. MAHOMED.

SANITATION AT BELPER.

Mr. Allen, Medical Officer of Health for No. 1 District of the Belper Union, in reference to our notice last week of the annual report, writes us to the effect that the words "is still to be found in the womb of the future," were intended to apply to the supineness of the guardians, and not to the provision of a proper disinfecting apparatus.

Fairplay.—We could not advise a prosecution for using a false title in the present state of the law, though it might possibly succeed.

Mr. C. Mackeson.—We must decline to exchange.

"SUDDEN DEATH FROM FRIGHT."

To the Editor of THE LANCET.

SIR,—The case of sudden death from fright given by Mr. J. E. Cooney in THE LANCET of Sept. 1st is extremely interesting. The post-mortem appearances are exactly those which would be found after death following division of both pneumogastric nerves; the lungs were not so gorged as they would be after suffocation by pressure on the trachea, and the right side of the heart was more distended with blood than it would be after death from narcotic gases, drowning, narcotic poisoning, or syncope.

On Dec. 31st, 1870, I was summoned (some fifty miles in the direction of Beloochistan) from Kotree, India, to ascertain the cause of death of a man who was seen struggling (wrestle-ways) with another the day previous, and suddenly fell dead. The external appearances presented no marks on the body excepting a slight abrasion on the scrotum, and a blue discolouration on the right side of the larynx. All the internal organs were healthy; the heart and lungs were anæmic or exsanguine. The cause of death was explained to be violence to the testicles, inducing syncope, and pressure on the side of the larynx, excluding air, and hence the absence of congestion of the lungs and right side of the heart. I agree with Mr. J. E. Cooney that death in his described case was due to emotion conveyed to the brain and medulla, but which thus became so intensely occupied, that no message was sent through the vagi. There was an arrest of breathing, as there was no perception of its objective necessity; a consequent stoppage of circulation through the lungs and distension of the capillaries, veins, and right side of the heart. The heart stopped, not because it was inhibited through the vagus, but on account of an insufficient arterial stimulus to its ganglia to keep it going. The right side of the heart seems to have been literally chocked *ex fronte*.

I am, Sir, yours truly,

JOHN ROCHE, M.D.,

Kingstown, Sept. 1st, 1883. Retired Indian Medical Service.

Surgeon-Major.—We understand that a more definite memorandum is in course of preparation, and will probably be soon issued.

A Glasgow Surgeon has not enclosed his card.

"LAWN TENNIS LEG."

To the Editor of THE LANCET.

SIR,—It appears strange that an insignificant muscle like the plantaris, which heretofore has been looked upon as comparatively useless in the human economy and more in the light of a "connecting link," should have been brought so prominently into notice of late years by the game of lawn tennis.

Several cases of its rupture have been quoted in your columns quite lately, and I have another to add to the list. My patient stated that whilst serving a ball with the "cutting down" stroke he felt as if some one had struck him sharply upon the calf of his leg, and immediately the limb became powerless. A few days subsequently large ecchymoses appeared, not only over the seat of the injury, but on the front of the leg as well, showing probably that the muscle itself was extensively lacerated. Perfect rest for a week till all local symptoms had subsided, and then a starch bandage and a high-heeled shoe, seemed all the interference required.

Professor Flower has kindly given me the following information respecting the muscle, which may prove of interest to others besides comparative anatomists:—"The so-called plantaris muscle in man represents in a rudimentary condition the superficial flexor of the digits in other mammals. Instead of ending in the tendo Achillis, its tendon passes over the os calcis to the sole of the foot, and takes the place and function of the flexor brevis in man. It is very difficult to account for the change that has taken place in man. Perhaps your observations upon its frequent rupture in playing lawn tennis, now to me, may throw some light upon it."—I am, Sir, yours obediently,

Finsbury-circus, E.C., Sept. 12th, 1883. HARVEY J. PHILPOT.

Purchaser.—Such details depend on the circumstances of each case, and should be clearly defined beforehand by contract.

J. S.—We know of no effectual remedy for the disfigurement.

ASYLUM FOR IMBECILES.

To the Editor of THE LANCET.

SIR,—Will any of your readers inform me if there exists any asylum which would receive an idiot girl of fourteen—dumb, perfectly imbecile, deaf, and entirely helpless in every way? She has carvature of spine since her birth, and is bedridden.

I am, Sir, your obedient servant,

Winslow, Bucks, Sept. 19th, 1883. THOMAS NEWHAM, M.D.

ERRATUM.—In our report of the Berlin Exhibition last week, page 474, line 49, first column, for "ferns," read *forms*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Attfield, London; Professor Struthers, Aberdeen; Dr. Wylie, Belfast; Dr. Andrew Wilson, London; Dr. Savage, London; Dr. E. S. Taylor, London; Mr. G. A. De'Ath, London; Messrs. Hussey and Walcott; Dr. Walter, Manchester; Mr. E. F. Neve, Edinburgh; Dr. Sharkey, London; Dr. Spottiswoode Cameron, Huddersfield; Dr. Mundie, Sydenham; Mr. W. J. Spence, Bradford; Dr. Tyson, Philadelphia; Mr. T. V. Lister, London; Dr. Kilner, London; Mr. H. P. Symonds, Oxford; Dr. J. Hawkes, London; Major Vaughan Morgan, London; Dr. J. Chalmers, London; Dr. O'Dwyer, Cairo; Dr. Reddie, Oudh; Mr. Nicholson; Mr. F. Todd, Hadleigh; Mr. Munro Scott, London; Mr. Makins, London; Mr. Townsend, Exeter; Dr. Adam, Malling, Kent; Mr. Cornish, Manchester; Mr. Shirley, Worcester; Mr. Jones, Broadshulke; Mr. Armstrong, Manchester; Mr. Bullivant, Derby; Mr. Donken, Midhurst; Mr. Nunn, Caithness; Messrs. Woolley and Co., Manchester; Mr. Ruspini, Knutsford; Dr. Fraill, Edinburgh; Mr. Whitmore, Darsley; Messrs. Smith and Son, Dublin; Dr. Jack, London; Dr. M. Morris, London; Mr. Dorman, St. Leonards-on-Sea; Messrs. Wright and Co., Birmingham; Mr. Stanniland, Leamington; Dr. Hassell, London; Mr. W. T. Clegg, Liverpool; Dr. Gordon Black, Harrogate; Dr. Davidson, Bombay; Mr. W. J. Browne, Edinburgh; Mr. C. E. Jennings, London; Dr. Macniven, Glasgow; Mr. Tallack, London; Dr. Robertson, Glasgow; Mr. E. R. Morgan, Morriston; Mr. Robinson, Tynemouth; Dr. Mahomed, London; Dr. Hunter, Ebbw-vale; Miss M'Donald, Lanark; Mr. Jones, London; Mr. Maylard, Glasgow; Mr. Doremus, London; Dr. Newham, Winslow; A. B., Swansea; Rocklands; M.D., Camberwell; Fairplay; Eosilon; C. R.; Eldnur; C. J.; H. J. J.; A Provincial Medical Officer of Health; Surgeon-Major; Anon.; R. P.; Alpha Beta; Parchaser; M.B., C.M.; Inquirer; J. A. M. B.; Vox et præterea Nihil; Electro; J. S. J.; J. A.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Skinner, Winchelsea; Mr. East; Mr. Buck, Boston; Mr. Hodgson, St. Helens; Mr. Gibbes, Ironbridge; Mr. Carpenter, Teignmouth; Mr. Henbrough, Grimsby; Mr. Brown, Packeridge; Mr. Pope, Tredegar; Dr. Coombs, Castle Cary; Mr. Lewes; Mr. Shone, Great Marlow; Mr. Scholefield, Bournemouth; Mr. Ormrod, Workington; Mr. M'Farland, Carara; Mr. Brear, Mirfield; Dr. Ewart, London; Mr. Watkins, Worcester; Mr. Conyers, Ilkley; Messrs. Latimer and Glanville, Exeter; Mr. Scott, Manchester; Mr. Pearce, Glamorgan; Mr. Turner, London; Dr. Broe, Rusholme; Dr. Connor, Allandale; Mr. Perkins, Worcester; Mr. Scott, Saxmundham; Dr. Mason, Pontypool; Mr. Otway, Boston; Mr. Holbrook, Hendon; Mr. M'Larem, Edinburgh; A. B., Denmark-hill; M.D.; G., Birmingham; R. W., Victoria-park; Alpha, Camberwell; M.D., Northallerton; Ex Officio, Droitwich; Libra; Principal, St. Leonards; E. F. G., Bermondsey; H. J., Peterboro'; A. B.; Kappa; M., Holloway; Pisistratus; M.R.C.S.; Cantab, Barnes; Vigilans; Thor, York; S. M.; Transfer, Leeds; G. S. J., Liverpool; S., London; M. J.; J. N., Cork; A. Z., Ladbroke-grove; Omega, London; Delta, Liverpool; Medicus, Hereford; Pomona, London; Fides; H. W. J.; H.; Alpha, Wivelscombe; P. C., Merthyr Tydfil; M.D., Nottinghill; Ozone, Liverpool; F. A. E., Newington; M.D., St. Ives; N. R., Salisbury; &c., &c.

Journal of Christian Science, Kent and Sussex Times, El Repertorio Medico, Egyptian Gazette, Northern Echo, Kensington News, Liverpool Courier, Sussex Daily News, Eastern Argus, La Emulacion, &c, have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Sept 20th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sept. 14	30·16	E.	58	55	95	72	53	..	Overcast
,, 15	29·96	N.	58	55	91	70	54	..	Overcast
,, 16	30·19	W.	62	57	99	73	51	..	Hazy
,, 17	30·25	S.E.	59	52	104	77	52	..	Hazy
,, 18	30·24	E.	58	54	106	75	54	·25	Hazy
,, 19	30·16	S.E.	62	56	107	77	56	..	Hazy
,, 20	29·79	S.E.	61	58	..	67	57	..	Overcast

Medical Diary for the ensuing Week.

Monday, Sept. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, Sept. 25.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, Sept. 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, Sept. 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, Sept. 28.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 29.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

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